

=> FILE REG

FILE 'REGISTRY' ENTERED AT 14:03:17 ON 08 NOV 2006  
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=> D HIS

FILE 'REGISTRY' ENTERED AT 10:54:49 ON 08 NOV 2006

E ALEURITIC ACID/CN

L1 2 S E3

SEL L1 1-2 RN

EDIT E1-E2 /BI /CRN

L2 24 S E1-E2

L3 26 S L1 OR L2

FILE 'HCA' ENTERED AT 10:58:43 ON 08 NOV 2006

L4 292 S L3 OR (ALEURITIC# OR TRIHYDROXYHEXADECANOIC# OR TRIHYDR

FILE 'REGISTRY' ENTERED AT 10:58:46 ON 08 NOV 2006

E SHELLOIC ACID/CN

E SHELLOLIC ACID/CN

L5 1 S E3

L6 3 S 4448-95-7/CRN

L7 4 S L5 OR L6

FILE 'HCA' ENTERED AT 11:01:58 ON 08 NOV 2006

L8 55 S L7 OR (SHELLOIC# OR SHELLOLIC#) (2A)ACID#

FILE 'REGISTRY' ENTERED AT 11:02:06 ON 08 NOV 2006

ACT OLEFINS/A

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L9 ( 1) SEA FILE=REGISTRY ETHYLENE/CN

L10 ( 1) SEA FILE=REGISTRY POLYETHYLENE/CN

L11 ( 1) SEA FILE=REGISTRY PROPYLENE/CN

L12 ( 1) SEA FILE=REGISTRY POLYPROPYLENE/CN

L13 ( 1) SEA FILE=REGISTRY 1-BUTENE/CN

L14 ( 1) SEA FILE=REGISTRY 2-BUTENE/CN

L15 ( 2) SEA FILE=REGISTRY POLYBUTENE/CN

L16 ( 2) SEA FILE=REGISTRY BUTADIENE/CN

L17 ( 1) SEA FILE=REGISTRY POLYBUTADIENE/CN

L18 ( 1) SEA FILE=REGISTRY ISOPRENE/CN

L19 ( 1) SEA FILE=REGISTRY POLYISOPRENE/CN

L20 13 SEA FILE=REGISTRY (L9 OR L10 OR L11 OR L12 OR L13 OR L14

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FILE 'LCA' ENTERED AT 11:02:17 ON 08 NOV 2006

L21 1280 S (POLYOLEFIN? OR POLYETHYLENE# OR POLYETHENE# OR PE OR P  
L22 461 S (POLY(W) (ETHYLENE# OR ETHENE# OR PROPYLENE# OR PROPENE#

FILE 'HCA' ENTERED AT 11:03:02 ON 08 NOV 2006

L23 895649 S L20 OR L21 OR L22 OR OLEFIN##  
L24 360349 S NUCLEAT? OR POLYNUCLEAT? OR SEED?  
L25 27 S L4 AND L23  
L26 21 S L4 AND L24  
L27 6 S L25 AND L26  
L28 21 S L25 NOT L27  
L29 15 S L26 NOT (L27 OR L28)  
L30 1 S L8 AND L23  
L31 3 S L8 AND L24  
L32 0 S L30 AND L31  
L33 4 S L30 OR L31  
L34 4 S L33 AND 1840-2004/PY,PRY  
L35 6 S L27 AND 1840-2004/PY,PRY  
L36 21 S L28 AND 1840-2004/PY,PRY  
L37 15 S L29 AND 1840-2004/PY,PRY

=> FILE HCA

FILE 'HCA' ENTERED AT 14:03:38 ON 08 NOV 2006

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=> D L34 1-4 CBIB ABS HITSTR HITIND

L34 ANSWER 1 OF 4 HCA COPYRIGHT 2006 ACS on STN

143:120105 Nonaqueous gel composition for tooth whitening and tooth whitening set. Oniki, Takayuki; Uchiyama, Akira; Fukuda, Yasushi; Inoue, Shimako (Lion Corporation, Japan). PCT Int. Appl. WO 2005063182 A1 20050714, 36 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IS, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (Japanese). CODEN: PIXXD2.

APPLICATION: WO 2004-JP19344 20041224. PRIORITY: JP 2003-432095 20031226.

AB A nonaq. gel compn. for tooth whitening, comprises: (A) a tooth whitening component of 17.0 to 43.0 specific inductive capacity

(25°C) and 0 to 7000 kPa vapor pressure (25°C), (B) a substance that is sol. in the tooth whitening component and is pptd. by an aq. soln. of calcium chloride, and (C) a gelling agent. The compn. contains substantially none of water and peroxides. This tooth whitening component can penetrate into the enamel surface layer of teeth to thereby alter the optical properties, such as refractive index and reflectance, of the enamel so that the enamel is apparently whitened. The whitened teeth can be restored to the original tooth color in a reversible manner in the presence of water. Further, the persistence of reversible whitening effect can be strikingly enhanced by the nonaq. gel compn. For example, a tooth-whitening gel compn. contained propylene glycol 43.5, isopropanol 24.99, ethanol 24, Ultrahold strong 1, Na lauryl sulfate 3, myristic acid diethanolamide 1, carboxyvinyl polymer 1, flavors 1, NaOH 0.01, and stevioside 0.5 %.

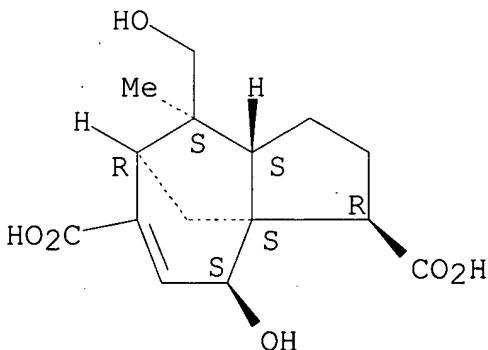
IT **4448-95-7, Shellolic acid**

(nonaq. gel compn. for tooth whitening by altering optical properties)

RN 4448-95-7 HCA

CN 1H-3a,7-Methanoazulene-3,6-dicarboxylic acid, 2,3,4,7,8,8a-hexahydro-4-hydroxy-8-(hydroxymethyl)-8-methyl-, (3R,3aS,4S,7R,8S,8aS)- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K007-16  
ICS A61K006-00

CC 62-7 (Essential Oils and Cosmetics)  
Section cross-reference(s): 63

IT 56-81-5, Glycerin, biological studies 57-55-6, Propylene glycol, biological studies 60-33-3, Linolic acid, biological studies 67-63-0, Isopropanol, biological studies 71-36-3, Butanol, biological studies 106-14-9, 12-Hydroxystearic acid 107-21-1, Ethylene glycol, biological studies 111-46-6, Diethylene glycol, biological studies 112-80-1, Oleic acid, biological studies 112-86-7, Erucic acid 373-49-9, Palmitoleic acid 463-40-1,

Linolenic acid 544-63-8, Myristic acid, biological studies  
**4448-95-7, Shellolic acid** 6949-98-0,  
9,10,16-Trihydroxypalmitic acid 9003-01-4, Polyacrylic acid,  
9004-32-4, Sodium CMC 9004-64-2, Hydroxypropyl cellulose  
25086-15-1, Methyl methacrylate-methacrylic acid copolymer  
25265-71-8, Dipropylene glycol 25265-75-2, Butylene glycol  
25322-68-3, **Polyethylene** glycol 26062-56-6, Ultrahold  
strong 26589-39-9 26657-27-2 30399-84-9, Isostearic acid  
70393-63-4 159666-35-0 176739-49-4, Methyl methacrylate-ethyl  
acrylate-methacrylic acid trimethylethylammonium copolymer,  
biological studies  
(nonaq. gel compn. for tooth whitening by altering optical  
properties)

L34 ANSWER 2 OF 4 HCA COPYRIGHT 2006 ACS on STN

86:40206 Constituent acids of soft resin from shellac. Chatterjea, J.  
N.; Sengupta, S. C.; Misra, G. S.; Agarwal, S. C. (Indian Lac Res.  
Inst., Ranchi, India). Indian Journal of Chemistry, Section B:  
Organic Chemistry Including Medicinal Chemistry, 14B(9), 719-21  
(English) 1976. CODEN: IJSBDB. ISSN: 0376-4699.

AB About 90% of the constituents of soft resin from palas **seed**  
-lac were isolated by chromatog. techniques and identified. The  
results show that the terpenic and aliph. acids are present roughly  
in a 50:50 ratio. 10,16-Dihydroxyhexadecanoic acid was isolated for  
the first time from soft resin.

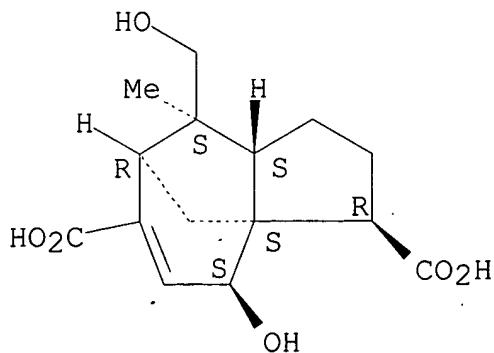
IT **4448-95-7**

(from palas **seed**-lac)

RN 4448-95-7 HCA

CN 1H-3a,7-Methanoazulene-3,6-dicarboxylic acid, 2,3,4,7,8,8a-hexahydro-  
4-hydroxy-8-(hydroxymethyl)-8-methyl-, (3R,3aS,4S,7R,8S,8aS)- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



CC 11-1 (Plant Biochemistry)

ST palas resin compn **seed**; Butea **seed** resin compn;

IT hydroxyhexadecanoate soft resin  
 IT Fatty acids, biological studies  
     (from palas **seed-lac**)  
 IT Butea frondosa  
     (**seeds**, soft resins from shellac from)  
 IT Carboxylic acids, biological studies  
     (terpenoid, from palas **seed-lac**)  
 IT 506-13-8   533-87-9   1619-68-7   1619-89-2   1747-02-0   1747-18-8  
   3233-90-7 **4448-95-7**   6718-99-6   22597-13-3  
   24205-55-8D, derivs.   24205-56-9   24205-58-1   24205-61-6  
   61668-04-0   61668-05-1  
     (from palas **seed-lac**)

L34 ANSWER 3 OF 4 HCA COPYRIGHT 2006 ACS on STN

74:23771 Chemistry of lac resin. IV. Pure lac resin. 1. Isolation and quantitative determination of constituent acids. Upadhye, Ajitnath B.; Wadia, Murzban S.; Mhaskar, Vyankatesh V.; Dev, Sukh (Nat. Chem. Lab., Poona, India). Tetrahedron, 26(17), 4177-87 (English) **1970**. CODEN: TETRAB. ISSN: 0040-4020.

AB From the hard resin of Palas (Butea frondosa) **seedlac**, an essentially pure lac resin fraction (termed pure lac resin) was isolated by the solvent pptn. method. Since some of the constituent acids of lac resin could not be estd. (as Me esters) by GLC (gas-liq. chromatog.), owing to decompn. on GLC columns, a semiquant. method for their estn., involving short-term hydrolysis, followed by oxidn. (CrO<sub>3</sub>), esterification, and GLC estn. of products, was developed. The pure lac resin mol. is derived from 3 mols. of aleuritic acid, 5 mols. of jalaric (**shellolic acid**), and 1 mol. of laccijalaric acid.

CC 43 (Cellulose, Lignin, Paper, and Other Wood Products)

ST. laccijalaric acid lac resin; lac resin acids detn; acids detn lac resin; palas **seedlac** resin sepn; resin sepn palas **seedlac**; aleuritic acid lac resin; jalaric acid lac resin; **shellolic acid** lac resin

L34 ANSWER 4 OF 4 HCA COPYRIGHT 2006 ACS on STN

74:4831 Chemistry of lac resin. III. Lac acids. 3. Integrated procedure for their isolation from hard resin; chromatography characteristics and quantitative determination. Khurana, R. G.; Singh, Achyuta Nand; Upadhye, Ajitnath B.; Mhaskar, Vyankatesh V.; Dev, Sukh (Nat. Chem. Lab., Poona, India). Tetrahedron, 26(17), 4167-75 (English) **1970**. CODEN: TETRAB. ISSN: 0040-4020.

AB A modified procedure for isolation of hard resin from **seedlac** is described. An integrated procedure for the isolation of various lac acids from the hard resin hydrolyzate was developed. Paper and thin-layer chromatog. characteristics of various lac acids, and their Me esters are reported. Detns. were made of aleuritic acid and aldehydic acids in hard and soft resins

of various origins.

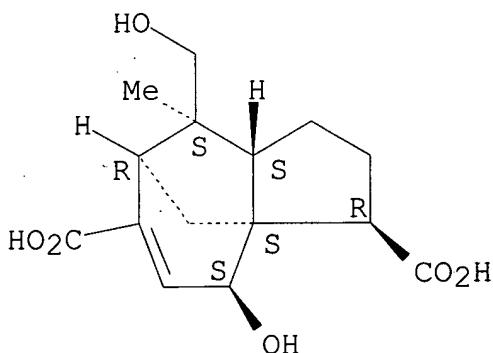
IT **4448-95-7P**

(from *Butea frondosa* seeds)

RN 4448-95-7 HCA

CN 1H-3a,7-Methanoazulene-3,6-dicarboxylic acid, 2,3,4,7,8,8a-hexahydro-4-hydroxy-8-(hydroxymethyl)-8-methyl-, (3R,3aS,4S,7R,8S,8aS)- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



CC 43 (Cellulose, Lignin, Paper, and Other Wood Products)

ST lac acids isolation resin; acids lac isolation resin; resin lac acids isolation; **seedlac** hard resin sepn; chromatog lac acids; aleuritic acid detn resins; aldehydic acids detn resins

IT Butea

(frondosa, lac acids from **seeds** of)

IT 533-87-9P 1747-18-8P **4448-95-7P** 6718-99-6P

24205-55-8P 24205-56-9P 24205-61-6P 24393-95-1P 24393-97-3P

24393-98-4P 30413-93-5P 33051-49-9P

(from *Butea frondosa* seeds)

=> D L35 1-6 CBIB ABS HITSTR HITIND

L35 ANSWER 1 OF 6 HCA COPYRIGHT 2006 ACS on STN

145:14124 Topical delivery system comprising esters of hydroxy acids for cosmetic and pharmaceutical agents. Gupta, Shyam K. (Bioderm Research, USA). U.S. Pat. Appl. Publ. US 2006110415 A1 20060525, 20 pp. (English). CODEN: USXXCO. APPLICATION: US 2004-904665 20041122.

AB This invention relates to topical compns. contg. esters of hydroxy acids and their application in the deep-penetration delivery of beneficial cosmetic and pharmaceutical agents. An ester of a hydroxy acid is selected from alkyl and aryl esters of glycolic, malic, lactic, mandelic, ascorbic, phytic, salicylic, **aleuritic**, and tartaric **acids**, etc. Thus, a skin whitening serum was prep'd. contg. Et lactate 20.0, hydroxypropyl guar 0.5,, quinacetophenone 5.0, PEG-6 70.0, arbutin 4.0, and preservatives 0.5 parts, resp. The product had a clear to slightly hazy serum-like appearance. It was absorbed rapidly with a silky smooth skin feel. Also, an arthritis pain relief anti-inflammatory gel was prep'd. contg. tri-Et citrate 55.65, Polyamide-3 5.0, preservative 0.5, Boswellia serrata ext. 0.05, N-acetylglucosamine 2.0, methylsulfonylmethane 5.0, Aloe vera 0.1, vitamin E 0.5, paeonol 0.5, magnolol 0.2, chondroitin sulfate 0.5, and zeolite 30.0 parts, resp.

IT **9002-88-4, Polyethylene**

(balls; topical delivery systems comprising esters of hydroxy acids as penetration enhancers for cosmetic and pharmaceutical uses)

RN 9002-88-4 HCA

CN Ethene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 74-85-1

CMF C2 H4



IT **17941-34-3, Aleuritic acid**

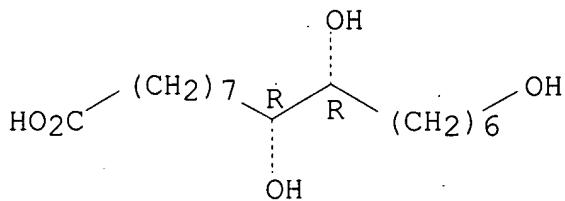
**17941-34-3D, Aleuritic acid**, alkyl and aryl esters

(topical delivery systems comprising esters of hydroxy acids as penetration enhancers for cosmetic and pharmaceutical uses)

RN 17941-34-3 HCA

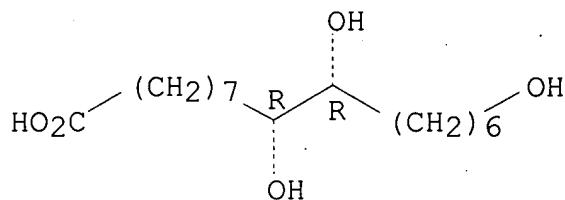
CN Hexadecanoic acid, 9,10,16-trihydroxy-, (9R,10R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 17941-34-3 HCA  
 CN Hexadecanoic acid, 9,10,16-trihydroxy-, (9R,10R)-rel- (9CI) (CA  
 INDEX NAME)

Relative stereochemistry.



INCL 424401000; 424059000  
 CC 62-4 (Essential Oils and Cosmetics)  
 Section cross-reference(s): 63  
 IT Fats and Glyceridic oils, biological studies  
 (grape **seed**; topical delivery systems comprising esters  
 of hydroxy acids as penetration enhancers for cosmetic and  
 pharmaceutical uses)  
 IT Cola (plant)  
 Vitis vinifera  
 (**seed** ext.; topical delivery systems comprising esters  
 of hydroxy acids as penetration enhancers for cosmetic and  
 pharmaceutical uses)  
 IT Aloe barbadensis  
 Analgesics  
 Andrographis paniculata  
 Anesthetics  
 Anti-inflammatory agents  
 Antianginal agents  
 Antibacterial agents  
 Antibiotics  
 Antidepressants  
 Antidiabetic agents  
 Antidiarrheals  
 Antiemetics

Antimigraine agents  
Antiobesity agents  
Antiosteoporotic agents  
Antioxidants  
Antiparkinsonian agents  
Antiperspirants  
Antiulcer agents  
Antiviral agents  
Bronchodilators  
Citrus sinensis  
Colloids  
Colognes  
Coloring materials  
Curcuma longa  
Fungicides  
Garcinia mangostana  
Haematococcus  
Human  
Humectants  
Immunomodulators  
Lycopersicon esculentum  
Mangifera indica  
Olea europaea  
Orange  
Perfumes  
Permeation enhancers  
Polygonum cuspidatum  
Preservatives  
Punica granatum

**Seed**

Shampoos  
Solubilizers  
Sunscreens  
Suspensions  
Tagetes patula  
UV stabilizers  
Vaccinium  
Vaccinium myrtillus  
Wound healing promoters

(topical delivery systems comprising esters of hydroxy acids as penetration enhancers for cosmetic and pharmaceutical uses)

IT **9002-88-4, Polyethylene**

(balls; topical delivery systems comprising esters of hydroxy acids as penetration enhancers for cosmetic and pharmaceutical uses)

IT 7512-17-6, N-Acetyl-glucosamine 7631-86-9, Silica, biological studies 7757-82-6, Sodium sulfate, biological studies 7775-50-0, Tristearyl citrate 7778-18-9, Calcium sulfate 8011-96-9,

Calamine 8050-88-2, Celluloid 9002-72-6, Growth hormone  
9003-05-8, Polyacrylamide 9003-39-8, Polyvinylpyrrolidone  
9004-38-0, Cellulose acetophthalate 9004-57-3, Ethyl cellulose  
9004-61-9, Hyaluronic acid 9004-61-9D, Hyaluronic acid, alkyl and  
aryl esters 9004-74-4, Methoxypolyethylene glycol 9004-99-3, PEG  
stearate 9005-64-5, Polysorbate-20 9006-65-9, Dimethicone  
9006-65-9D, Dimethicone, crosslinked 9006-65-9D, Dimethicone,  
vinyl dimethicone crosspolymer 9007-28-7, Chondroitin sulfate  
9012-76-4, Chitosan 9049-76-7, Hydroxypropyl starch 9050-31-1,  
Hydroxypropyl methyl cellulose phthalate 9088-07-7, Natriuretic  
peptide 10216-17-8, Hydroxytetronic acid 11099-07-3, Glyceryl  
stearate 11103-57-4, Vitamin A 12001-76-2, Vitamin B  
12001-79-5, Vitamin K 13106-41-7 13382-27-9D, Galactonic acid,  
alkyl and aryl esters 13463-18-8, Glutathione ascorbate  
13463-67-7, Titanium dioxide, biological studies 13494-10-5  
13544-79-1 13674-16-3 13752-83-5D, Arabinonic acid, alkyl and  
aryl esters 13752-84-6D, Erythronic acid, alkyl and aryl esters  
14007-02-4 14639-25-9, Chromium(III) picolinate 14919-24-5  
15399-05-0 16503-00-7 16544-70-0, Trihexyl citrate 16742-49-7,  
Methyl 2-hydroxyeicosanoate 16742-51-1, Methyl  
2-hydroxyhexadecanoate 16830-15-2, Asiaticoside 17463-61-5  
17812-24-7D, Ribonic acid, alkyl and aryl esters 17828-56-7D,  
Xyloonic acid, alkyl and aryl esters **17941-34-3**,

**Aleuritic acid 17941-34-3D,**

**Aleuritic acid, alkyl and aryl esters**

18294-96-7, Ethyl 2-hydroxyheptanoate 18294-99-0 18295-02-8  
18295-04-0 18295-07-3 18925-86-5 19239-78-2 19329-89-6,  
Isopentyl lactate 20246-52-0D, Talonic acid, alkyl and aryl esters  
20246-53-1D, Gulonic acid, alkyl and aryl esters 20279-51-0, Hexyl  
lactate 20283-92-5, Rosmarinic acid 20309-57-3 20731-95-7  
23351-51-1D, Glucoheptonic acid, alkyl and aryl esters  
24871-35-0D, Altronic acid, alkyl and aryl esters 25086-15-1,  
Methacrylic acid-methyl methacrylate copolymer 25190-06-1,  
**Polybutylene** glycol 25212-88-8, Ethyl acrylate-methacrylic  
acid copolymer 25265-75-2, Butylene glycol 25322-68-3,

**Polyethylene** glycol 25322-69-4, **Polypropylene**

glycol 25618-55-7, Polyglycerol 26163-61-1 26326-73-8  
26762-67-4, Octanediol 26838-05-1, Disodium lauryl sulfosuccinate  
27178-06-9 27517-34-6D, graft polymer derivs. 27750-10-3,  
Hydroxycitric acid 27750-10-3D, Hydroxycitric acid, alkyl and aryl  
esters and salts 28223-40-7D, Lyxonic acid, alkyl and aryl esters  
28223-42-9D, Allonic acid, alkyl and aryl esters 28514-63-8  
28572-98-7, Ethyl methacrylate-methacrylic acid copolymer  
29130-41-4 29130-42-5 29589-99-9, Distearyl citrate  
29674-47-3, Methyl 2-hydroxybutanoate 29710-25-6, 2-Ethylhexyl  
12-hydroxystearate 32122-08-0 32619-42-4, Oleuropein  
33709-29-4 34900-10-2 35161-44-5 35354-74-6, Honokiol  
36062-04-1, Tetrahydrocurcumin 36653-82-4, Cetyl alcohol

37205-99-5, Carboxymethyl ethyl cellulose 38771-96-9 39421-75-5,  
 Hydroxypropyl guar 42175-34-8, Decyl lactate 45208-03-5, Dodecyl  
 glycolate 51067-85-7, Methyl 2-hydroxydodecanoate 51261-06-4  
 51261-08-6 51261-33-7 51261-34-8 51261-35-9 51863-60-6,  
 3,5-Dihydroxyacetophenone 52089-54-0, Ethyl 2-hydroxybutanoate  
 52089-55-1, Ethyl 2-hydroxyhexanoate 52182-15-7 52182-16-8  
 52613-19-1 53798-96-2 54340-91-9, Methyl 2-hydroxyheptanoate  
 55306-04-2, Sericoside 56009-40-6, Methyl 2-hydroxytetradecanoate  
 56210-21-0 56780-58-6, Starch hydroxypropyltrimonium chloride  
 56842-80-9 56996-83-9, Phaseolamine 57448-83-6 58450-52-5,  
 Disodium laureth sulfosuccinate 59113-36-9, Diglycerol  
 59219-65-7, Darutoside 59443-15-1 59854-10-3, tert-Butyl lactate  
 60787-27-1 61574-64-9 62123-57-3 63167-15-7 63363-19-9  
 65277-53-4 65497-29-2, Guar hydroxypropyltrimonium chloride  
 66267-54-7 66267-58-1 66634-12-6, Niacinamide salicylate  
 68756-64-9, Methyl 2-hydroxyhexanoate 70289-34-8 70356-09-1,  
 Avobenzone 71138-97-1, Hydroxypropyl methyl cellulose acetate  
 succinate 71271-24-4, Methyl 2-hydroxydecanoate 73573-57-6  
 73634-76-1, Methyl 2-hydroxyoctanoate 73634-77-2 74592-76-0  
 76414-35-2 76994-59-7 85918-30-5, 2,3,6-Trihydroxyacetophenone  
 86432-23-7, Sodium stearyl phthalamate 90357-58-7, Propyl  
 glycolate 90675-74-4 91776-00-0, PEG 120 methyl glucose dioleate  
 93168-18-4, Ethyl 2-hydroxyoctanoate 93993-87-4 94006-12-9  
 94231-35-3 94983-14-9 100386-17-2 100495-94-1 100528-82-3  
 100963-05-1 101396-13-8 101396-15-0 101453-14-9 101996-62-7  
 101996-63-8 101996-64-9 101996-65-0 102162-44-7 102370-27-4  
 103049-26-9 104037-54-9 105911-24-8 105911-25-9 106522-72-9  
 106522-73-0 108740-82-5 110343-04-9, Glycerol lactate  
 110713-02-5 110945-08-9 114214-84-5 114214-85-6 116435-95-1  
 116557-40-5 117576-13-3 118068-28-3 120154-90-7 120154-91-8,  
 Octyl 2-hydroxyoctanoate 120154-92-9, Ethyl 2-hydroxyoctadecanoate  
 122579-43-5 124111-47-3 125913-31-7, Ascorbyl phosphate  
 125971-06-4 126679-54-7 126925-06-2 129086-73-3, Ethyl  
 2-hydroxytetradecanoate 134970-46-0 135322-32-6, Chitosan  
 ascorbate 135970-30-8 136208-65-6 136208-68-9 136315-05-4  
 136599-01-4D, alkyl and aryl esters 136745-48-7 143894-93-3,  
 Decyl 2-hydroxyoctanoate 152167-64-1 152167-65-2 161776-71-2  
 162328-63-4 162328-64-5 162328-65-6 162328-67-8 163418-44-8  
 172098-18-9 172464-76-5 173855-08-8 174882-69-0, Pycnogenol  
 175897-68-4 176035-22-6 199282-59-2 199282-60-5 199282-61-6  
 199282-62-7 199282-63-8 199282-65-0 199282-66-1 199282-67-2  
 199282-70-7 199282-71-8 199282-73-0 199282-74-1 199282-75-2  
 199282-77-4 199282-78-5

(topical delivery systems comprising esters of hydroxy acids as  
penetration enhancers for cosmetic and pharmaceutical uses)

*Instant  
application*

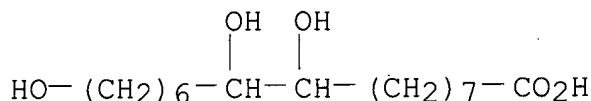
**nucleating** agents for their preparation. Vernekar, Subhash P.; Chellaswamy, Ramesh; Sivaram, S. (Council of Scientific and Industrial Research, India). U.S. Pat. Appl. Publ. US 2005215681 A1 20050929, 6 pp. (English). CODEN: USXXCO. APPLICATION: US 2004-810337 20040326.

AB The present invention provides **nucleated polyolefins** using shellac based **nucleating** agents (e.g., K aleuritate) wherein the **nucleated polyolefins** obtained have improved crystn. temp. (Tc) and smaller spherulitic size and hence improved transparency characteristics.

IT 33067-69-5, Calcium aleuritate 857899-81-1,  
Potassium aleuritate 857899-82-2, Aluminum aleuritate  
857899-83-3, Magnesium aleuritate 865444-59-3  
(**nucleating** agents for prepn. of **nucleated polyolefins** with good cryst. temp. and smaller spherulitic size and transparency)

RN 33067-69-5 HCA

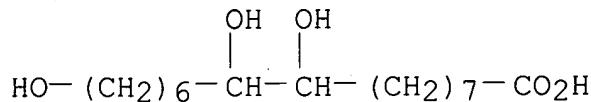
CN Hexadecanoic acid, 9,10,16-trihydroxy-, calcium salt (2:1) (8CI, 9CI) (CA INDEX NAME)



● 1/2 Ca

RN 857899-81-1 HCA

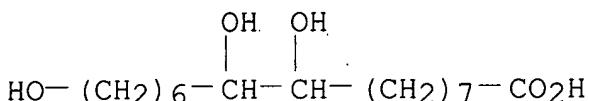
CN Hexadecanoic acid, 9,10,16-trihydroxy-, monopotassium salt (9CI) (CA INDEX NAME)



● K

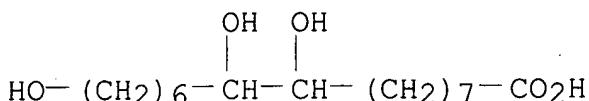
RN 857899-82-2 HCA

CN Hexadecanoic acid, 9,10,16-trihydroxy-, aluminum salt (3:1) (9CI) (CA INDEX NAME)



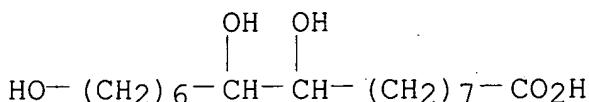
## ● 1/3 Al

RN 857899-83-3 HCA  
 CN Hexadecanoic acid, 9,10,16-trihydroxy-, magnesium salt (2:1) (9CI)  
 (CA INDEX NAME)



## ● 1/2 Mg

RN 865444-59-3 HCA  
 CN Hexadecanoic acid, 9,10,16-trihydroxy-, monolithium salt (9CI) (CA INDEX NAME)



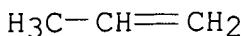
## ● Li

IT 9003-07-0P, **Polypropylene**  
 (nucleating agents for prepn. of nucleated polyolefins with good cryst. temp. and smaller spherulitic size and transparency)

RN 9003-07-0 HCA  
 CN 1-Propene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 115-07-1  
 CMF C3 H6



IC ICM C08K005-04  
 INCL 524394000  
 CC 37-3 (Plastics Manufacture and Processing)  
 ST aleuritate **nucleating** agent **polyolefin** crystn  
     temp spherulitic particle size; transparency spherulitic particle  
     **nucleated polyolefin** shellac based  
     **nucleation**  
 IT Crystal **nucleating** agents  
     Crystallization temperature  
         (**nucleating** agents for prepn. of **nucleated**  
         **polyolefins** with good cryst. temp. and smaller  
         spherulitic size and transparency)  
 IT **Polyolefins**  
     (**nucleating** agents for prepn. of **nucleated**  
     **polyolefins** with good cryst. temp. and smaller  
     spherulitic size and transparency)  
 IT **33067-69-5**, Calcium aleuritate **857899-81-1**,  
     Potassium aleuritate **857899-82-2**, Aluminum aleuritate  
     **857899-83-3**, Magnesium aleuritate 857899-84-4, Magnesium  
     shelloate 857899-85-5, Calcium shelloate **865444-59-3**  
     865444-60-6 865444-61-7 865444-62-8  
         (**nucleating** agents for prepn. of **nucleated**  
         **polyolefins** with good cryst. temp. and smaller  
         spherulitic size and transparency)  
 IT **9003-07-0P, Polypropylene**  
     (**nucleating** agents for prepn. of **nucleated**  
     **polyolefins** with good cryst. temp. and smaller  
     spherulitic size and transparency)

L35 ANSWER 3 OF 6 HCA COPYRIGHT 2006 ACS on STN

143:116199 **Nucleated polyolefins** and  
**nucleation** agents for preparation thereof. Vernekar,  
 Subhash Pundlik; Chellaswamy, Ramesh; Sivaram, S. (Council of  
 Scientific & Industrial Research, India). PCT Int. Appl. WO  
 2005063867 A1 20050714, 15 pp. DESIGNATED STATES: W: AE, AG, AL,  
 AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ,  
 DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,  
 IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
 MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC,  
 SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN,  
 YU, ZA, ZM, ZW; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK,  
 ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN,  
 TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2003-IN453  
 20031231.

AB The present invention provides **nucleated**

**polyolefins** using shellac based **nucleating** agents (e.g., K aleuritata) wherein the **nucleated** **polyolefins** obtained have improved crystn. temp. (Tc) and smaller spherulitic size and hence improved transparency characteristics.

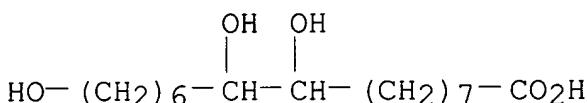
IT 33067-69-5P 857899-81-1P 857899-82-2P

857899-83-3P

(nucleation agent; shellac **nucleating** agents for prepn. of **nucleated polyolefins**)

RN 33067-69-5 HCA

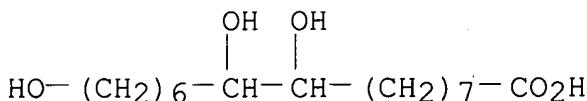
CN Hexadecanoic acid, 9,10,16-trihydroxy-, calcium salt (2:1) (8CI, 9CI) (CA INDEX NAME)



● 1/2 Ca

RN 857899-81-1 HCA

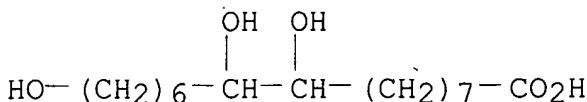
CN Hexadecanoic acid, 9,10,16-trihydroxy-, monopotassium salt (9CI) (CA INDEX NAME)



● K

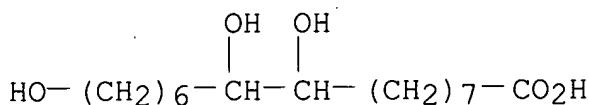
RN 857899-82-2 HCA

CN Hexadecanoic acid, 9,10,16-trihydroxy-, aluminum salt (3:1) (9CI) (CA INDEX NAME)



● 1/3 Al

RN 857899-83-3 HCA  
 CN Hexadecanoic acid, 9,10,16-trihydroxy-, magnesium salt (2:1) (9CI)  
 (CA INDEX NAME)



● 1/2 Mg

IT 9002-88-4, Polyethylene 9003-07-0,  
**Polypropylene**  
 (shellac **nucleating** agents for prepn. of  
**nucleated polyolefins**)

RN 9002-88-4 HCA  
 CN Ethene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 74-85-1  
 CMF C2 H4



RN 9003-07-0 HCA  
 CN 1-Propene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 115-07-1  
 CMF C3 H6



IC ICM C08K005-00  
 ICS C08K005-053; C08K005-098  
 CC 37-3 (Plastics Manufacture and Processing)  
 ST shellac **nucleating** agent **nucleated**  
**polyolefin** prodn  
 IT Crystal **nucleating** agents  
 (shellac **nucleating** agents for prepn. of  
**nucleated polyolefins**)  
 IT **Polyolefins**

(shellac **nucleating** agents for prepn. of  
**nucleated polyolefins**)

IT 33067-69-5P 857899-81-1P 857899-82-2P  
 857899-83-3P 857899-84-4P 857899-85-5P  
 (nucleation agent; shellac **nucleating** agents  
 for prepn. of **nucleated polyolefins**)

IT 9002-88-4, **Polyethylene** 9003-07-0,  
**Polypropylene** 9010-79-1, Ethylene-propylene copolymer  
 (shellac **nucleating** agents for prepn. of  
**nucleated polyolefins**)

L35 ANSWER 4 OF 6 HCA COPYRIGHT 2006 ACS on STN

141:400499 Cosmetic and pharmaceutical ion-pair delivery system based  
 masks comprising biopolymer based films cross-linked with metal  
 cations. Gupta, Shyam K. (USA). U.S. Pat. Appl. Publ. US  
 2004219124 A1 **20041104**, 9 pp. (English). CODEN: USXXCO.

APPLICATION: US 2003-249701 20030501.

AB The present invention discloses a novel ion-pair delivery system  
 based mask compns. for face, hair, skin, and body applications.  
 These compns. come off from the site of their application  
 essentially in one piece with the appearance, for example, of a  
 piece of sea-weed or a continuous film. These mask compns. are  
 suitable for a variety of delivery system methods, such as peel-off  
 mask, moisturizing mask, exfoliating mask, prosthetic mask, soaking  
 mask, depilatory mask, rub-off mask, two-phase mask, two-compartment  
 mask, heat-releasing mask, and such. These mask compns. are made  
 from the biopolymer based films that are cross-linked with divalent  
 or trivalent metal cations. During the crosslinking process, such  
 divalent and trivalent metal cations may also act as release agents  
 for other face, hair, skin, and body beneficial compns. in their  
 enhanced bioavailable forms by an ion-pair activation mechanism.

IT **9002-88-4, Polyethylene**  
 (ball; cosmetic and pharmaceutical ion-pair delivery system based  
 masks comprising plant exts. and cosmetic and therapeutic uses  
 thereof)

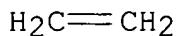
RN 9002-88-4 HCA

CN Ethene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 74-85-1

CMF C2 H4



IT **17941-34-3, Aleuritic acid**  
 (cosmetic and pharmaceutical ion-pair delivery system based masks



Crosslinking  
Curcuma longa  
Eisenia (seaweed)  
Emblica  
Enteromorpha  
Filipendula ulmaria  
Fucus  
Fungicides  
Garcinia  
Garcinia cambogia  
Garcinia mangostana  
Gelidium  
Glycyrrhiza glabra  
Gochnatia blanchetiana  
Gymnema sylvestre  
Haematococcus  
Hair  
Hedera helix  
Hibiscus furcellatus  
Humectants  
Hypericum perforatum  
Hypnea  
Kaempferia galanga  
Laminaria  
Leukocyte  
Lycopersicon esculentum  
Macrocytis  
Mangifera indica  
Maprounea guianensis  
Marisa  
Melilotus officinalis  
Microemulsions  
Mitracarpus scaber  
Monostroma  
Olea europaea  
Orange  
Orthosiphon  
Palmaria  
Panax  
Panax ginseng  
Perfumes  
Phaeodactylum  
Phaseolus vulgaris  
Phyllanthus emblica  
Plankton  
Plectranthus barbatus  
Polygonum cuspidatum  
Porphyra

Potentilla erecta  
Preservatives  
Punica granatum  
Randia armata  
Rhodophyta  
Rosmarinus officinalis  
Rumex crispus  
Rumex occidentalis  
Ruscus aculeatus  
Salvia officinalis  
Sargassum  
Seaweed

**Seed**

Siegesbeckia orientalis  
Solubilizers  
Spirulina  
Spondias mombin  
Suspensions  
Tagetes patula  
Tephrosia  
Terminalia sericea  
Thermus  
Trigonella foenum-graecum  
Ulva lactuca  
Undaria  
Vaccinium myrtillus  
Vasoconstrictors  
Vasodilators  
Waltheria indica

(cosmetic and pharmaceutical ion-pair delivery system based masks comprising plant exts. and cosmetic and therapeutic uses thereof)

IT Cola (plant)

Vitis vinifera

(**seed**; cosmetic and pharmaceutical ion-pair delivery system based masks comprising plant exts. and cosmetic and therapeutic uses thereof)

IT Nut (**seed**)

(shell, broken **seed**; cosmetic and pharmaceutical ion-pair delivery system based masks comprising plant exts. and cosmetic and therapeutic uses thereof)

IT **9002-88-4, Polyethylene**

(ball; cosmetic and pharmaceutical ion-pair delivery system based masks comprising plant exts. and cosmetic and therapeutic uses thereof)

IT 50-21-5, Lactic acid, biological studies 50-81-7, Ascorbic acid, biological studies 50-81-7D, Ascorbic acid, DNA conjugates 51-67-2, Tyramine 53-41-8, Androsterone 53-43-0, Dehydroepiandrosterone 56-81-5, Glycerin, biological studies

57-13-6, Urea, biological studies 57-83-0, Progesterone, biological studies 58-22-0, Testosterone 58-85-5, Biotin 59-30-3, Folic Acid, biological studies 59-67-6D, Niacin, Esters 63-05-8, Androstenedione 69-72-7, Salicylic acid, biological studies 70-18-8, Glutathione, biological studies 73-31-4, Melatonin 77-52-1, Ursolic acid 77-92-9, Citric acid, biological studies 79-14-1, Glycolic acid, biological studies 83-72-7, Lawsone 90-64-2, Mandelic acid 93-60-7, Methyl Nicotinate 94-44-0, Benzyl Nicotinate 94-62-2, Piperine 97-59-6, Allantoin 100-51-6, Benzyl Alcohol, biological studies 104-14-3, Octopamine 104-28-9, Cinoxate 117-39-5, Quercetin 118-56-9, Homosalate 118-60-5 122-99-6, Phenoxyethanol 123-31-9, Hydroquinone, biological studies 127-40-2, Lutein 131-57-7, Benzophenone-3 134-09-8, Menthyl anthranilate 136-44-7 145-13-1, Pregnenolone 146-48-5, Yohimbine 150-13-0, PABA 153-18-4, Rutin 299-28-5, Calcium gluconate 327-97-9, Chlorogenic acid 370-98-9, N-Methyltyramine 404-86-4, Capsaicin 471-34-1, Calcium carbonate, biological studies 471-53-4, Glycyrrhetic acid 472-11-7, Ruscogenin 472-61-7, Astaxanthin 476-66-4, Ellagic acid 491-70-3, Luteolin 497-76-7, Arbutin 502-65-8, Lycopene 512-04-9, Diosgenin 520-26-3, Hesperidin 520-27-4, Diosmin 520-36-5, Apigenin 520-45-6, Dehydroacetic Acid 528-58-5, Cyanidin 531-75-9, Esculin 539-15-1, Hordenine 546-93-0, Magnesium carbonate 557-34-6, Zinc acetate 824-35-1, Calcium salicylate 1200-22-2, Lipoic acid 1303-96-4, Borax 1314-13-2, Zinc oxide, biological studies 1406-16-2, Vitamin D 1406-18-4, Vitamin E 1406-18-4D, Vitamin E, derivs. 1987-71-9 2174-16-5, Trolamine salicylate 3486-35-9, Zinc carbonate 4065-45-6, Benzophenone-4 4468-02-4, Zinc gluconate 4773-96-0, Mangiferin 5001-51-4, Calcium lactobionate 5466-77-3 5508-58-7, Andrographolide 5743-27-1, Calcium ascorbate 6147-11-1, Mangostin 6197-30-4, Octocrylene 6805-41-0, Escin 6829-55-6, Tocotrienol 6915-15-7, Malic acid 7446-70-0, Aluminum chloride, biological studies 7487-88-9, Epsom salt, biological studies 7646-85-7, Zinc chloride, biological studies 7693-13-2, Calcium citrate 7778-18-9, Calcium sulfate 7779-25-1, Magnesium citrate 7786-30-3, Magnesium chloride, biological studies 8063-16-9, Psyllium 9003-01-4, Polyacrylic acid 9003-01-4D, Polyacrylic acid, TEA derivs., 9003-03-6, Ammonium polyacrylate 9003-04-7, Sodium polyacrylate 9004-61-9, Hyaluronic acid 9005-32-7, Alginic acid 9005-32-7D, Alginic acid, TEA derivs., 9005-34-9, Ammonium alginate 9005-36-1, Potassium alginate 9005-38-3, Algin 9006-65-9, Dimethicone 10043-35-3, Boric acid, biological studies 10043-52-4, Calcium chloride, biological studies 10124-37-5, Calcium nitrate 10216-17-8, Hydroxytetronic acid 11103-57-4, Vitamin A 11138-66-2, Xanthan gum 12001-76-2, Vitamin B 12001-79-5, Vitamin K 13463-18-8, Glutathione ascorbate 13463-67-7, Titanium dioxide, biological studies 14476-25-6,

Calamine 15431-40-0, Magnesium ascorbate 16589-24-5, Synephrine 16830-15-2, Asiaticoside 17463-61-5 **17941-34-3**,  
**Aleuritic acid** 18917-89-0, Magnesium salicylate  
 20283-92-5, Rosmarinic acid 21645-51-2, Aluminum hydroxide,  
 biological studies 25608-12-2, Potassium polyacrylate 27556-18-9  
 27750-10-3, Hydroxycitric acid 32619-42-4, Oleuropein  
 36062-04-1, Tetrahydrocurcumin 55306-04-2, Sericoside 57448-83-6  
 59219-65-7, Darutoside 70356-09-1, Avobenzone 71010-52-1, Gellan  
 gum 94231-35-3 121250-47-3, Conjugated linoleic acid  
 135322-32-6, Chitosan ascorbate 174882-69-0, Pycnogenol  
 211504-83-5 439666-13-4 676608-06-3 676608-07-4 676608-08-5  
 683226-75-7 697291-65-9, Phytosan 728945-82-2, Azaftig  
 736997-34-5

(cosmetic and pharmaceutical ion-pair delivery system based masks comprising biopolymer based films cross-linked with metal cations)

L35 ANSWER 5 OF 6 HCA COPYRIGHT 2006 ACS on STN

141:370229 Controlled-release nano-diffusion delivery systems for cosmetic and pharmaceutical compositions. Gupta, Shyam K. (USA). U.S. Pat. Appl. Publ. US 2004208902 A1 **20041021**, 9 pp.

(English). CODEN: USXXCO. APPLICATION: US 2003-418495 20030418.

AB The present invention discloses the utilization of zeolites for controlled-release of cosmetic and pharmaceutical compns. by nano-diffusion technol. The treatment and protection of skin surface requires that certain compns. be delivered to the skin surface and allowed to remain on the skin surface for as long as possible before such ingredients are absorbed into deeper layers of skin and carried into the bloodstream. Zeolites do not absorb into the skin, which is useful for topical delivery of cosmetic and pharmaceutical compns., for example antiaging, anti-wrinkle, antioxidants, skin whitening, acne treatment, rosacea treatment, sun screens, UV blocks, anesthetics, skin soothers, anti-irritants, anti-inflammatory agents, vitamins, hormones, and such that are electronically attached to the outer surfaces of such zeolites and are released to the outer surface of skin by a diffusion-controlled thermodn. process. An anhyd. face mask controlled-release antiaging compn. with heat-releasing effect. comprises magnesium sulfate (anhyd.) 30.0, glycerin 49.0, sodium potassium aluminosilicate (Zeolite A3) 20.0, an antiaging compn. (an equal wt. mixt. of tetrahydrocurcumin, niacinamide lactate, copper ATP complex, glutathione, and carnosine) 1.0%.

IT **9002-88-4, Polyethylene**

(balls; controlled-release nano-diffusion delivery systems for cosmetic and pharmaceutical compns.)

RN 9002-88-4 HCA

CN Ethene, homopolymer (9CI) (CA INDEX NAME)

CM 1

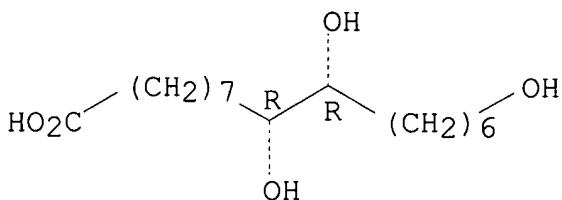
CRN 74-85-1  
CMF C2 H4IT **17941-34-3, Aleuritic acid**

(controlled-release nano-diffusion delivery systems for cosmetic and pharmaceutical compns.)

RN 17941-34-3 HCA

CN Hexadecanoic acid, 9,10,16-trihydroxy-, (9R,10R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

IC ICM A61K031-401  
ICS A61K007-00

INCL 424401000; 514423000

CC 62-4 (Essential Oils and Cosmetics)  
Section cross-reference(s): 63IT Cola (plant)  
(seed ext.; controlled-release nano-diffusion delivery systems for cosmetic and pharmaceutical compns.)IT **9002-88-4, Polyethylene**

(balls; controlled-release nano-diffusion delivery systems for cosmetic and pharmaceutical compns.)

IT 50-21-5, Lactic acid, biological studies 50-81-7, Ascorbic acid, biological studies 50-81-7D, Ascorbic acid, derivs. 51-67-2, Tyramine 53-41-8, Androsterone 53-43-0, DHEA 53-86-1, Indomethacin 56-65-5, Adenosine triphosphate, biological studies 56-81-5, Glycerin, biological studies 57-00-1, Creatine 57-13-6, Urea, biological studies 57-83-0, Progesterone, biological studies 58-08-2, Caffeine, biological studies 58-22-0, Testosterone 58-55-9, Theophylline, biological studies 58-61-7, Adenosine, biological studies 58-63-9, Inosine 58-64-0, Adenosine diphosphate, biological studies 58-85-5, Biotin 59-30-3, Folic Acid, biological studies 63-05-8, Androstenedione 69-72-7, Salicylic acid, biological studies 70-18-8, Glutathione,

biological studies 73-31-4, Melatonin 77-52-1, Ursolic acid  
77-92-9, Citric acid, biological studies 79-14-1, Glycolic acid,  
biological studies 83-67-0, Theobromine 83-72-7, Lawsone  
90-64-2, Mandelic acid 94-62-2, Piperine 97-59-6, Allantoin  
98-92-0, Niacinamide 98-98-6D, Picolinic acid, chromium complexes  
100-51-6, Benzyl Alcohol, biological studies 101-20-2,  
Triclocarban 104-14-3, Octopamine 104-28-9, Cinoxate 117-39-5,  
Quercetin 118-56-9, Homosalate 118-60-5, 2-Ethylhexyl salicylate  
122-99-6, Phenoxyethanol 123-31-9, Hydroquinone, biological  
studies 123-31-9D, Hydroquinone, derivs. 127-17-3, Pyruvic acid,  
biological studies 127-17-3D, salts 127-40-2, Lutein 131-57-7,  
Benzophenone-3 134-09-8, Menthyl anthranilate 145-13-1,  
Pregnenolone 147-81-9, Arabinose 150-13-0, PABA 153-18-4,  
Rutin 302-79-4, Retinoic acid 305-84-0, Carnosine 317-34-0,  
Aminophylline) 327-97-9, Chlorogenic acid 370-98-9,  
N-Methyltyramine 471-53-4, Glycyrrhetic acid 476-66-4, Ellagic  
acid 477-32-7, Visnadine 488-69-7, Fructose-1,6-diphosphate  
491-67-8, Baicalein 491-70-3, Luteolin 497-76-7, Arbutin  
501-36-0, Resveratrol 502-65-8, Lycopene 520-26-3, Hesperidin  
520-27-4, Diosmin 520-36-5, Apigenin 520-45-6, Dehydroacetic  
Acid 528-58-5, Cyanidin 539-15-1, Hordenine 541-15-1,  
L-Carnitine 557-34-6, Zinc acetate 602-41-5, Thiocolchicoside  
1200-22-2,  $\alpha$ -Lipoic acid 1314-13-2, Zinc oxide, biological  
studies 1399-64-0, Gymnemic acid 1406-16-2, Vitamin D  
1406-18-4, Vitamin E 1987-71-9, Nicotinamide ascorbate  
2086-83-1, Berberine 2174-16-5, Trolamine salicylate 2420-56-6  
2540-56-9, 9-cis-11-trans-Linoleic acid 3380-34-5, Triclosan  
3486-35-9, Zinc carbonate 4065-45-6, Benzophenone-4 4773-96-0,  
Mangiferin 5466-77-3, 2-Ethylhexyl p-methoxycinnamate 5508-58-7,  
Andrographolide ( 6147-11-1, Mangostin 6197-30-4, Octocrylene  
6829-55-6, Tocotrienol 6915-15-7, Malic acid 7439-96-5,  
Manganese, biological studies 7440-47-3D, Chromium, picolinate  
complexes 7440-50-8, Copper, biological studies 7440-66-6, Zinc,  
biological studies 7631-86-9, Silica, biological studies  
8011-96-9, Calamine 9002-72-6, Somatotropin 9004-61-9,  
Hyaluronic acid 9006-65-9, Dimethicone 9012-76-4, Chitosan  
9088-07-7, Natriuretic peptide 10216-17-8, Hydroxytetronic acid  
11103-57-4, Vitamin A 12001-76-2, Vitamin B 12001-79-5, Vitamin  
K 13106-41-7 13463-18-8, Glutathione ascorbate 16589-24-5,  
Synephrine 16830-15-2, Asiaticoside 17463-61-5  
**17941-34-3, Aleuritic acid** 20283-92-5,  
Rosmarinic acid 27750-10-3, Hydroxycitric acid 32619-42-4,  
Oleuropein 36062-04-1, Tetrahydrocurcumin 55306-04-2, Sericoside  
56996-83-9, Phaseolamin 57448-83-6 59219-65-7, Darutoside  
70356-09-1, Avobenzone 94231-35-3 120718-57-2 121250-47-3,  
Conjugated linoleic acid 125913-31-7, Ascorbyl phosphate  
135322-32-6, Chitosan ascorbate 174882-69-0, Pycnogenol  
211504-83-5 439666-13-4 676608-06-3 676608-07-4, Chondroitin

ascorbate 676608-08-5, Carnosine ascorbate 683226-75-7  
697291-65-9, Phytosan 728945-82-2, Azaftig  
(controlled-release nano-diffusion delivery systems for cosmetic  
and pharmaceutical compns.)

L35 ANSWER 6 OF 6 HCA COPYRIGHT 2006 ACS on STN  
141:195281 Topically bioavailable acne and rosacea treatment  
compositions. Gupta, Shyam K. (USA). U.S. Pat. Appl. Publ. US  
2004156873 A1 **20040812**, 10 pp. (English). CODEN: USXXCO.  
APPLICATION: US 2003-248691 20030210.

AB The present invention relates to acne and rosacea compns. by a  
six-prong synergistic combination treatment strategy that includes  
(1) control of excess sebum prodn., (2) control of undesirable  
bacteria or mites, (3) control of inflammation, (4) enhanced  
desquamation of follicular infundibulum cells, (5) redn. of  
irritation from anti-acne or rosacea compns. themselves, and (6)  
enhancement of the topical bioavailability of anti-acne and rosacea  
compns. This is achieved by a synergistic combination of commonly  
utilized topical anti-acne and rosacea ingredients with a topical  
bioavailability enhancement compn., which results in enhanced  
anti-acne and rosacea action from such ingredients. Moreover,  
addnl. inclusion of an anti-inflammatory compn., and also a vascular  
micro-circulation enhancement compn., further results in synergistic  
superior anti-acne and rosacea benefits from such compns. The  
present invention discloses addnl. surprising synergistic  
combinations for the control of acne and rosacea that are suitable  
for a variety of delivery systems and packaging forms. For example,  
a facial mask contained chitosan 5.0%, lactic acid 5.0%, glycerin  
18.%, water 70.6%, yohimbine-HCl 0.5%, niacinamide lipoate 0.5%,  
glutathione 0.2%, and preservatives 0.5%. Chitosan, lactic acid and  
glycerin were mixed to a paste. Other ingredients were mixed sep.  
to a clear soln. The soln. was added to main batch and mixed. A  
clear gel product obtained was applied on the face and neck and left  
for 10 to 30 min, then rinsed off.

IT **9002-88-4, Polyethylene**  
(balls; topically bioavailable synergistic combination for acne  
and rosacea treatment)

RN 9002-88-4 HCA

CN Ethene, homopolymer (9CI) (CA INDEX NAME)

CM . 1

CRN 74-85-1

CMF C2 H4

H<sub>2</sub>C=CH<sub>2</sub>

IT   **686351-64-4 686351-72-4 686351-79-1  
686351-86-0 686351-91-7 686351-97-3**

(topically bioavailable synergistic combination for acne and rosacea treatment)

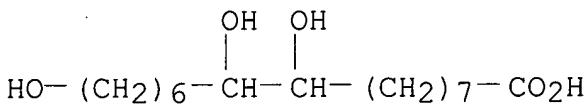
RN   686351-64-4 HCA

CN   Hexadecanoic acid, 9,10,16-trihydroxy-, compd. with (2,5-dioxo-4-imidazolidinyl)urea (1:1) (9CI) (CA INDEX NAME)

CM   1

CRN   6949-98-0

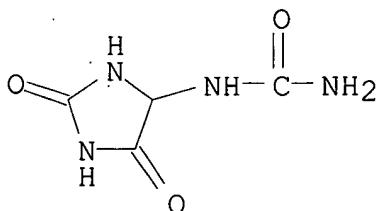
CMF   C16 H32 O5



CM   2

CRN   97-59-6

CMF   C4 H6 N4 O3



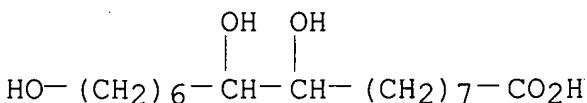
RN   686351-72-4 HCA

CN   D-Glucose, 2-amino-2-deoxy-, mono(9,10,16-trihydroxyhexadecanoate) (9CI) (CA INDEX NAME)

CM   1

CRN   6949-98-0

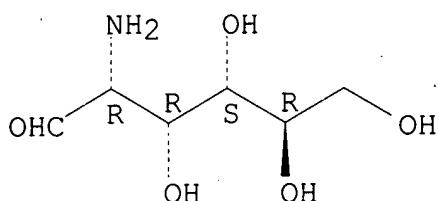
CMF   C16 H32 O5



CM   2

CRN 3416-24-8  
 CMF C<sub>6</sub> H<sub>13</sub> N O<sub>5</sub>

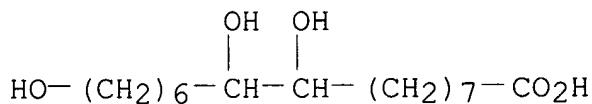
Absolute stereochemistry. Rotation (+).



RN 686351-79-1 HCA  
 CN Glycine, N-(aminoiminomethyl)-N-methyl-, mono(9,10,16-trihydroxyhexadecanoate) (9CI) (CA INDEX NAME)

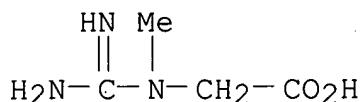
CM 1

CRN 6949-98-0  
 CMF C<sub>16</sub> H<sub>32</sub> O<sub>5</sub>



CM 2

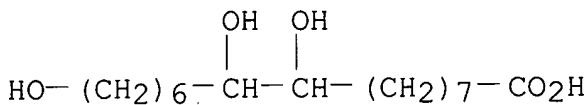
CRN 57-00-1  
 CMF C<sub>4</sub> H<sub>9</sub> N<sub>3</sub> O<sub>2</sub>



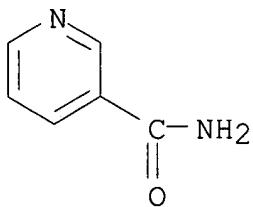
RN 686351-86-0 HCA  
 CN 3-Pyridinecarboxamide, mono(9,10,16-trihydroxyhexadecanoate) (9CI) (CA INDEX NAME)

CM 1

CRN 6949-98-0  
 CMF C<sub>16</sub> H<sub>32</sub> O<sub>5</sub>

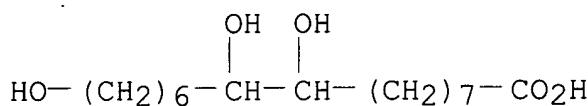


CM 2

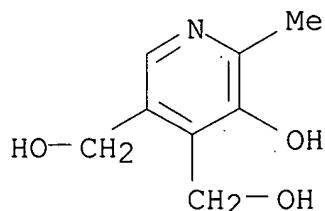
CRN 98-92-0  
CMF C6 H6 N2 O

RN 686351-91-7 HCA  
 CN Hexadecanoic acid, 9,10,16-trihydroxy-, compd. with  
 5-hydroxy-6-methyl-3,4-pyridinedimethanol (1:1) (9CI) (CA INDEX  
 NAME)

CM 1

CRN 6949-98-0  
CMF C16 H32 O5

CM 2

CRN 65-23-6  
CMF C8 H11 N O3

RN 686351-97-3 HCA  
 CN Chitosan, 9,10,16-trihydroxyhexadecanoate (salt) (9CI) (CA INDEX  
 NAME)

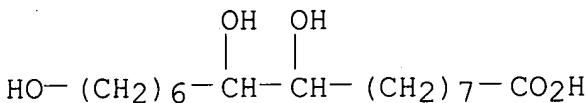
CM 1

CRN 9012-76-4  
 CMF Unspecified  
 CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 6949-98-0  
 CMF C16 H32 O5



IC ICM A61K031-728  
 ICS A61K031-7008; A61K031-60; A61K031-205  
 INCL 424401000; 514062000; 514160000; 514389000; 514356000; 514054000;  
 514554000  
 CC 63-6 (Pharmaceuticals)  
 Section cross-reference(s): 1, 62  
 IT Vitis vinifera  
 (seed ext.; topically bioavailable synergistic  
 combination for acne and rosacea treatment)  
 IT **9002-88-4, Polyethylene**  
 (balls; topically bioavailable synergistic combination for acne  
 and rosacea treatment)  
 IT 50-21-5, Lactic acid, biological studies 50-81-7, Ascorbic acid,  
 biological studies 50-81-7D, Ascorbic acid, derivs. 58-95-7,  
 Vitamin E acetate 59-67-6, Niacin, biological studies 59-67-6D,  
 Niacin, esters 65-19-0, Yohimbine hydrochloride 65-23-6,  
 Pyridoxine 69-72-7, Salicylic acid, biological studies 70-18-8,  
 Glutathione, biological studies 77-52-1, Ursolic acid 79-81-2,  
 Vitamin A palmitate 93-60-7, Methyl nicotinate 94-44-0, Benzyl  
 nicotinate 94-62-2, Piperine 98-92-0, Niacinamide 100-51-6,  
 Benzyl alcohol, biological studies 117-39-5, Quercetin 122-99-6,  
 Phenoxyethanol 123-99-9, Azelaic acid, biological studies  
 125-46-2, Usnic acid 146-48-5, Yohimbine 153-18-4, Rutin  
 302-79-4, Retinoic acid 305-84-0, Carnosine 404-86-4, Capsaicin  
 471-53-4, Glycyrrhetic acid 491-70-3, Luteolin 520-36-5,  
 Apigenin 520-45-6, Dehydroacetic acid 531-75-9, Esculin  
 627-82-7 1200-22-2,  $\alpha$ -Lipoic acid 1320-83-8 1406-18-4,

Vitamin E 3369-95-7, Pyridoxine ascorbate 4589-04-2 6805-41-0,  
 Escin 6829-55-6, Tocotrienol 7631-86-9, Silica, biological  
 studies 7778-18-9, Calcium sulfate 9012-76-4, Chitosan  
 12001-79-5, Vitamin K 13463-18-8, Glutathione ascorbate  
 24187-16-4 24404-95-3 35454-96-7 57448-83-6 66267-50-3,  
 Chitosan lactate 66634-12-6 84563-64-4 84563-67-7, Chitosan  
 salicylate 84563-77-9, Chitosan glycolate 84563-85-9, Chitosan  
 citrate 88640-44-2 91869-06-6, Chitosan malate 114374-92-4  
 127528-07-8 135322-32-6, Chitosan ascorbate 176950-43-9  
 177024-62-3, Creatine citrate 178037-44-0, Micromerol  
 211504-83-5 213915-11-8 253662-27-0 365424-29-9 439666-12-3  
 439666-13-4 544455-23-4 544455-29-0 666825-40-7 676608-06-3  
 676608-07-4 676608-08-5 683226-74-6 683226-75-7 683226-76-8  
 683226-77-9 683226-78-0 683226-80-4 683226-81-5 683226-82-6  
 683226-83-7 683226-84-8 683226-85-9 683226-86-0 686351-57-5  
 686351-58-6 686351-59-7 686351-60-0 686351-61-1 686351-62-2  
 686351-63-3 **686351-64-4** 686351-65-5 686351-66-6  
 686351-67-7 686351-69-9 686351-70-2 686351-71-3  
**686351-72-4** 686351-73-5 686351-74-6 686351-76-8  
 686351-77-9 686351-78-0 **686351-79-1** 686351-80-4  
 686351-81-5 686351-82-6 686351-83-7 686351-84-8  
**686351-86-0** 686351-87-1 686351-88-2 686351-89-3  
 686351-90-6 **686351-91-7** 686351-92-8 686351-93-9  
 686351-94-0 686351-95-1 686351-96-2 **686351-97-3**  
 697291-65-9, Phytosan 736997-23-2 736997-24-3 736997-25-4  
 736997-26-5 736997-27-6 736997-28-7 736997-29-8 736997-34-5  
 737803-19-9, Melarrest L 737803-20-2, Chlorelline 737803-22-4,  
 Helioxine  
 (topically bioavailable synergistic combination for acne and  
 rosacea treatment)

=> D L36 1-21 CBIB ABS HITSTR HITIND

L36 ANSWER 1 OF 21 HCA COPYRIGHT 2006 ACS on STN

145:110414 Concurrent enhancement of skin penetration of organic base  
 active agents and organic hydroxy acid active agents as their  
 ion-pair complexes. Gupta, Shyam K. (Biaderm Research, USA). U.S.  
 Pat. Appl. Publ. US 2006147508 A1 20060706, 15 pp., Cont.-in-part of  
 U.S. Ser. No. 439,349. (English). CODEN: USXXCO. APPLICATION: US  
 2006-307729 20060218. PRIORITY: US 2002-265000 20021004; US  
 2002-280519 20021025; US 2002-290933 20021107; US 2003-394851  
 20030322; US 2003-439349 20030515.

AB This invention relates to concurrent enhancement of skin penetration  
 of certain org. nitrogen heterocyclic base active agents and certain  
 org. acid active agents, esp. org. hydroxy acids. This concurrent  
 enhancement of skin penetration also provides enhanced  
 bioavailability of both org. nitrogen heterocyclic base active agent

and org. hydroxy acid active agent. The org. nitrogen heterocyclic base active agents and org. hydroxy acid active agents are first combined to form an ion-pair complex, which includes an in-situ mixing process, and said ion-pair complex is applied topically, whereupon said ion-pair complex undergoes enhanced skin penetration and upon reaching uppermost living part of skin and having reached therein the physiol. pH of 7.4, said ion-pair complex dissocs. to release its constituent org. nitrogen heterocyclic base active agent and said org. acid active agent in a bioavailable form.

IT 17941-34-3, Aleuritic acid

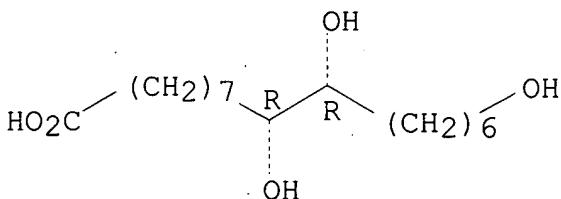
686351-86-0 686351-91-7

(concurrent enhancement of skin penetration of org. base active agents and org. hydroxy acid active agents as their ion-pair complexes)

RN 17941-34-3 HCA

CN Hexadecanoic acid, 9,10,16-trihydroxy-, (9R,10R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



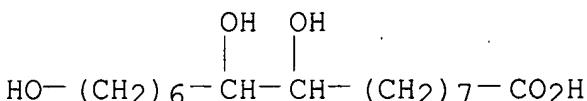
RN 686351-86-0 HCA

CN 3-Pyridinecarboxamide, mono(9,10,16-trihydroxyhexadecanoate) (9CI) (CA INDEX NAME)

CM 1

CRN 6949-98-0

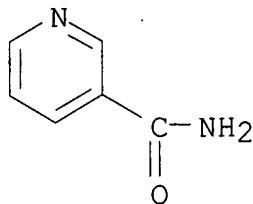
CMF C16 H32 O5



CM 2

CRN 98-92-0

CMF C6 H6 N2 O



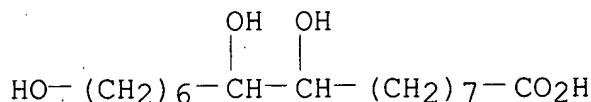
RN 686351-91-7 HCA

CN Hexadecanoic acid, 9,10,16-trihydroxy-, compd. with  
5-hydroxy-6-methyl-3,4-pyridinedimethanol (1:1) (9CI) (CA INDEX  
NAME)

CM 1

CRN 6949-98-0

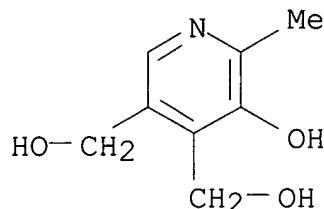
CMF C16 H32 O5



CM 2

CRN 65-23-6

CMF C8 H11 N O3



INCL 424448000; 514101000; 514102000; 514350000; 514356000; 514276000

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 62

IT 50-21-5, Lactic acid, biological studies 50-81-7, Ascorbic acid,  
biological studies 59-43-8, Thiamine, biological studies  
59-67-6D, Niacin, alkyl esters 65-23-6, Pyridoxine 69-72-7,  
Salicylic acid, biological studies 79-14-1, Glycolic acid,  
biological studies 83-86-3, Phytic acid 90-64-2, Mandelic acid  
98-92-0, Niacinamide 327-97-9, Chlorogenic acid 476-66-4,  
Ellagic acid 593-39-5, Petroselinic acid 1987-71-9, Niacinamide  
ascorbate 3369-95-7, Pyridoxine ascorbate 4589-04-2 6915-15-7,

Malic acid 10216-17-8, Hydroxytetronic acid **17941-34-3**,  
**Aleuritic acid** 20283-92-5, Rosmarinic acid  
27750-10-3, Hydroxycitric acid 27750-13-6, Garcinia lactone  
66634-12-6, Niacinamide salicylate 125913-31-7, Ascorbyl phosphate  
127528-07-8 365424-29-9 683226-74-6 683226-76-8, Niacinamide  
lactate 683226-77-9D, deivs. 683226-78-0 683226-79-1  
683226-80-4 686351-84-8 **686351-86-0** 686351-87-1  
686351-88-2 686351-89-3 686351-90-6 **686351-91-7**  
686351-92-8 686351-93-9 895129-49-4

(concurrent enhancement of skin penetration of org. base active agents and org. hydroxy acid active agents as their ion-pair complexes)

IT 64-17-5, Alcohol, biological studies 107-21-1, 1,2-Ethanediol, biological studies 25322-68-3, **Polyethylene** glycol  
(concurrent enhancement of skin penetration of org. base active agents and org. hydroxy acid active agents as their ion-pair complexes)

L36 ANSWER 2 OF 21 HCA COPYRIGHT 2006 ACS on STN

143:120105 Nonaqueous gel composition for tooth whitening and tooth whitening set. Oniki, Takayuki; Uchiyama, Akira; Fukuda, Yasushi; Inoue, Shimako (Lion Corporation, Japan). PCT Int. Appl. WO 2005063182 A1 20050714, 36 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IS, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (Japanese). CODEN: PIXXD2.

APPLICATION: WO 2004-JP19344 20041224. PRIORITY: JP 2003-432095 20031226.

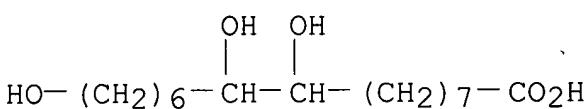
AB A nonaq. gel compn. for tooth whitening, comprises: (A) a tooth whitening component of 17.0 to 43.0 specific inductive capacity (25°C) and 0 to 7000 kPa vapor pressure (25°C), (B) a substance that is sol. in the tooth whitening component and is pptd. by an aq. soln. of calcium chloride, and (C) a gelling agent. The compn. contains substantially none of water and peroxides. This tooth whitening component can penetrate into the enamel surface layer of teeth to thereby alter the optical properties, such as refractive index and reflectance, of the enamel so that the enamel is apparently whitened. The whitened teeth can be restored to the original tooth color in a reversible manner in the presence of water. Further, the persistence of reversible whitening effect can be strikingly enhanced by the nonaq. gel compn. For example, a tooth-whitening gel compn. contained propylene glycol 43.5, isopropanol 24.99, ethanol 24, Ultrahold strong 1, Na lauryl sulfate

3, myristic acid diethanolamide 1, carboxyvinyl polymer 1, flavors 1, NaOH 0.01, and stevioside 0.5 %.

IT **6949-98-0, 9,10,16-Trihydroxypalmitic acid**  
(nonaq. gel compn. for tooth whitening by altering optical properties)

RN 6949-98-0 HCA

CN Hexadecanoic acid, 9,10,16-trihydroxy- (7CI, 8CI, 9CI) (CA INDEX NAME)



IC ICM A61K007-16  
ICS A61K006-00

CC 62-7 (Essential Oils and Cosmetics)  
Section cross-reference(s): 63

IT 56-81-5, Glycerin, biological studies 57-55-6, Propylene glycol, biological studies 60-33-3, Linolic acid, biological studies 67-63-0, Isopropanol, biological studies 71-36-3, Butanol, biological studies 106-14-9, 12-Hydroxystearic acid 107-21-1, Ethylene glycol, biological studies 111-46-6, Diethylene glycol, biological studies 112-80-1, Oleic acid, biological studies 112-86-7, Erucic acid 373-49-9, Palmitoleic acid 463-40-1, Linolenic acid 544-63-8, Myristic acid, biological studies 4448-95-7, Shellolic acid **6949-98-0, 9,10,16-**

**Trihydroxypalmitic acid** 9003-01-4, Polyacrylic acid 9004-32-4, Sodium CMC 9004-64-2, Hydroxypropyl cellulose 25086-15-1, Methyl methacrylate-methacrylic acid copolymer 25265-71-8, Dipropylene glycol 25265-75-2, Butylene glycol 25322-68-3, **Polyethylene** glycol 26062-56-6, Ultrahold strong 26589-39-9 26657-27-2 30399-84-9, Isostearic acid 70393-63-4 159666-35-0 176739-49-4, Methyl methacrylate-ethyl acrylate-methacrylic acid trimethylethylammonium copolymer, biological studies

(nonaq. gel compn. for tooth whitening by altering optical properties)

L36 ANSWER 3 OF 21 HCA COPYRIGHT 2006 ACS on STN

141:282426 Cosmetic composition containing a polyester of an hydroxylated carboxylic acid triglyceride and an oil with a molar mass of 650-1000 g/mol. Blin, Xavier; Filippi, Vanina (L'oreal, Fr.). Eur. Pat. Appl. EP 1457201 A1 **20040915**, 17 pp.

DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR. (French). CODEN: EPXXDW. APPLICATION: EP 2004-290593 20040304. PRIORITY: FR 2003-3078 20030312.

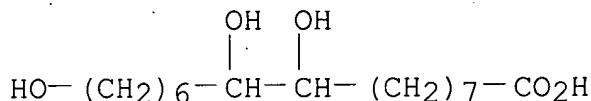
AB The title compns. are claimed which have remarkable cosmetic properties such as luster, and comfort. A lipstick contained Zenigloss 22, Elefacos ST9 11,2-decyltetradecanoic acid triglyceride 20, hydrogenated **polyisobutene** 10, di-isostearyl malate 11, **polybutylene** 2.5, octacosanyl stearate 5, a mixt. of lauric, myristic, palmitic, stearic acid triglycerides 2, **polyethylene** wax 5, hectorite modified by di-stearyl di-Me ammonium chloride 3, pigments q.s., preservatives q.s., and perfume q.s. 100%.

IT **6949-98-0 9003-29-6, Polybutylene**

(cosmetic compn. contg. polyester of hydroxylated carboxylic acid triglyceride and oil)

RN 6949-98-0 HCA

CN Hexadecanoic acid, 9,10,16-trihydroxy- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 9003-29-6 HCA

CN Butene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 25167-67-3

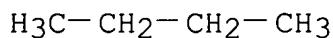
CMF C4 H8

CCI IDS

CM 2

CRN 106-97-8

CMF C4 H10



IC ICM A61K007-48

ICS A61K007-021; A61K007-025

CC 62-4 (Essential Oils and Cosmetics)

IT 106-14-9, 12-Hydroxy stearic acid 120-87-6, 9,10-Dihydroxy octadecanoic acid 141-22-0, RicinoleIC acid 498-36-2, Leucinic acid 629-22-1,  $\alpha$ -Hydroxyoctadecanoic acid 4130-35-2, Tridecyl trimellitate 4444-16-0 **6949-98-0** 9003-27-4D,

**Polyisobutylene**, hydrogenated **9003-29-6**,

**Polybutylene** 9003-39-8, PVP 13893-40-8,

3-Hydroxy-4-hexenoic acid 14450-05-6, Pentaerythrityl

tetrapelargonate 25027-95-6, 9,10,12-Trihydroxy octadecanoic acid 25754-87-4, 9,12-Dihydroxy octadecanoic acid 26942-95-0, Glyceryl triisostearate 26952-14-7D, Hexadecene, copolymers 30306-47-9, Hydroxynervonic acid 30399-84-9, Isostearic Acid 37309-58-3, Polydecene 37309-58-3D, Polydecene, hydrogenated 62125-22-8, Pentaerythrityl tetraisostearate 93803-89-5, Pentaerythrityl tetraisononanoate 187887-27-0 301824-14-6, Triisoarachidyl citrate 337975-97-0, 2-Ethyl-3-hydroxycaprylic acid 338450-65-0, Hexahydroxyoctadecanoic acid 338450-66-1, Octahydroxyoctadecanoic acid 375375-69-2 710306-07-3 756899-84-0, 14-Hydroxyeicosenoic acid 756900-61-5  
 (cosmetic compn. contg. polyester of hydroxylated carboxylic acid triglyceride and oil)

L36 ANSWER 4 OF 21 HCA COPYRIGHT 2006 ACS on STN

141:265584 Cosmetic composition comprising a hydroxylated carboxylic acid triglyceride polyester and a pasty compound. Blin, Xavier; Filippi, Vanina (L'oreal, Fr.). Eur. Pat. Appl. EP 1457193 A1 20040915, 19 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR. (French). CODEN: EPXXDW. APPLICATION: EP 2004-290592 20040304. PRIORITY: FR 2003-3077 20030312; FR 2003-3079 20030312.

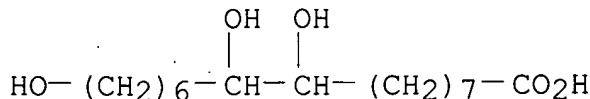
AB The title compns. are claimed which have remarkable cosmetic properties such as luster, and comfort. A lipstick contained Zenigloss 22, Elefacos ST9 11, 2-decytetradecanoic acid triglyceride 20, hydrogenated **polyisobutene** 10, di-isostearyl malate 11, **polybutylene** 2.5, octacosanyl stearate 5, a mixt. of lauric, myristic, palmitic, stearic acid triglycerides 2, **polyethylene** wax 5, hectorite modified by di-stearyl di-Me ammonium chloride 3, pigments q.s., preservatives q.s., and perfume q.s. 100%.

IT **6949-98-0 9003-29-6, Polybutylene**

(cosmetic compn. comprising hydroxylated carboxylic acid triglyceride polyester and pasty compd.)

RN 6949-98-0 HCA

CN Hexadecanoic acid, 9,10,16-trihydroxy- (7CI, 8CI, 9CI) (CA INDEX NAME)



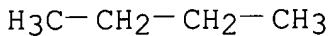
RN 9003-29-6 HCA

CN Butene, homopolymer (9CI) (CA INDEX NAME)

CRN 25167-67-3  
 CMF C4 H8  
 CCI IDS

CM 2

CRN 106-97-8  
 CMF C4 H10



IC ICM A61K007-025  
 CC 62-4 (Essential Oils and Cosmetics)  
 IT Acrylic polymers, biological studies  
 Fatty acids, biological studies  
 Fluoropolymers, biological studies  
 Oils

**Polyolefins**

Polysiloxanes, biological studies

(cosmetic compn. comprising hydroxylated carboxylic acid triglyceride polyester and pasty compd.)

IT 106-14-9, 12-Hydroxy stearic acid 115-77-5D, Pentaerythritol, esters 120-87-6, 9 10-Dihydroxy octadecanoic acid 141-22-0, RicinoleIC acid 498-36-2 629-22-1,  $\alpha$ -Hydroxy octadecanoic acid 4444-16-0 **6949-98-0** 9003-19-4, Vinyl ether polymers 9003-27-4D, **Polyisobutylene**, hydrogenated **9003-29-6**, **Polybutylene** 9003-39-8, PVP 9016-00-6D, Polydimethylsiloxane, Me trifluoropropyl alkyl derivs. 13893-40-8 25027-95-6, 9,10, 12 Trihydroxy octadecanoic acid 25754-87-4, 9, 12-Dihydroxy octadecanoic acid 26952-14-7D, Hexadecene, copolymers 30306-47-9 30399-84-9, Isostearic Acid 31900-57-9D, Polydimethylsiloxane, Me trifluoropropyl alkyl derivs. 37309-58-3, Polydecene 37309-58-3D, Polydecene, hydrogenated 65591-14-2, Arachidyl propionate 337975-97-0 338450-65-0 338450-66-1 756899-84-0 (cosmetic compn. comprising hydroxylated carboxylic acid triglyceride polyester and pasty compd.)

L36 ANSWER 5 OF 21 HCA COPYRIGHT 2006 ACS on STN  
 141:194959 Skin firming anti-aging cosmetic compositions. Gupta, Shyam K. (USA). U.S. Pat. Appl. Publ. US 2004161435 A1 **20040819**, 12 pp. (English). CODEN: USXXCO. APPLICATION: US 2003-248753 20030214.

AB Cosmetic mask compns. suitable for face, neck, chin or body applications are disclosed. These compns. synergistically combine at least 1 skin beneficial cosmetic or pharmaceutical compn. with at

least one compn. to promote excess fat redn., cellulite control, or muscle toning benefits. The mask compn. also contains at least one binder compn. that binds with other beneficial ingredients by electrostatic, at., or ionic charges to synergistically enhance their topical site-specific benefits. These mask compns. are suitable for a variety of delivery system methods that include, e.g., peel-off mask, leave-in mask, moisturizing mask, and exfoliating mask. Thua, a facial mask compn. contained chitosan 5.0, lactic acid 5.0, glycerin 18.0, water 65.8, hydroxycitric acid 5.0, niacinamide 0.5, glutathione, and preservatives 0.5%.

IT **9002-88-4, Polyethylene 17941-34-3,**

**Aleuritic acid**

(skin firming anti-aging cosmetic compns.)

RN 9002-88-4 HCA

CN Ethene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 74-85-1

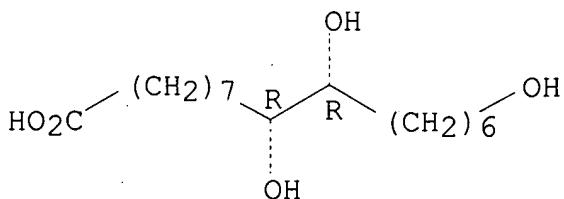
CMF C2 H4



RN 17941-34-3 HCA

CN Hexadecanoic acid, 9,10,16-trihydroxy-, (9R,10R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IC ICM A61K007-42

ICS A61K007-06; A61K007-00; A61K035-78

INCL 424401000; 424074000; 424725000; 424059000

CC 62-4 (Essential Oils and Cosmetics)

Section cross-reference(s): 63

IT 50-21-5, Lactic acid, biological studies 50-81-7, Ascorbic acid, biological studies 50-81-7D, Ascorbic acid, derivs. 51-67-2,

Tyramine 53-41-8, Androsterone 53-43-0, DHEA 53-86-1,

Indomethacin 56-65-5, Adenosine triphosphate, biological studies

56-81-5, Glycerin, biological studies 57-00-1, Creatine 57-13-6,

Urea, biological studies 57-83-0, Progesterone, biological studies 58-08-2, Caffeine, biological studies 58-22-0, Testosterone 58-55-9, Theophylline, biological studies 58-61-7, Adenosine, biological studies 58-63-9, Inosine 58-64-0, Adenosine diphosphate, biological studies 58-85-5, Biotin 58-95-7, Vitamin E acetate 59-30-3, Folic acid, biological studies 59-67-6, Niacin, biological studies 59-67-6D, Niacin, esters 63-05-8, Androstenedione 68-26-8, Vitamin A 69-72-7, Salicylic acid, biological studies 70-18-8, Glutathione, biological studies 73-31-4, Melatonin 77-52-1, Ursolic acid 77-92-9, Citric acid, biological studies 79-14-1, Glycolic acid, biological studies 79-81-2, Vitamin A palmitate 83-67-0, Theobromine 83-72-7, Lawsone 90-64-2, Mandelic acid 93-60-7, Methyl nicotinate 94-44-0, Benzyl nicotinate 94-62-2, Piperine 97-59-6, Allantoin 98-98-6D, Picolinic acid, complex with chromium 100-51-6, Benzyl alcohol, biological studies 101-20-2, Triclocarban 104-14-3, Octopamine 104-28-9, Cinoxate 117-39-5, Quercetin 118-56-9, Homosalate 118-60-5, 2-Ethylhexyl salicylate 122-99-6, Phenoxyethanol 127-17-3, Pyruvic acid, biological studies 127-17-3D, Pyruvic acid, salts 127-40-2, Lutein 134-09-8, Menthyl anthranilate 145-13-1, Pregnenolone 146-48-5, Yohimbine 147-81-9, Arabinose 150-13-0, PABA 153-18-4, Rutin 305-84-0, Carnosine 317-34-0, Aminophylline 327-97-9, Chlorogenic acid 370-98-9, N-Methyltyramine 404-86-4, Capsaicin 471-53-4, Glycyrrhetic acid 472-61-7, Astaxanthin 476-66-4, Ellagic acid 488-69-7, Fructose-1,6-diphosphate 491-67-8, Baicalein 491-70-3, Luteolin 501-36-0, Resveratrol 502-65-8, Lycopene 512-04-9, Diosgenin 520-26-3, Hesperidin 520-27-4, Diosmin 520-36-5, Apigenin 520-45-6, Dehydroacetic acid 528-58-5, Cyanidin 531-75-9, Esculin 539-15-1, Hordenine 541-15-1, L-Carnitine 548-04-9, Hypericin 1200-22-2,  $\alpha$ -Lipoic acid 1314-13-2, Zinc oxide (ZnO), biological studies 1344-28-1, Alumina, biological studies 1399-64-0, Gymnemic acid 1406-16-2, Vitamin D 1406-18-4, Vitamin E 1987-71-9 2086-83-1, Berberine 2174-16-5, Trolamine salicylate 2420-56-6, 10-trans,12-cis-Linoleic acid 2540-56-9, 9-cis,11-trans-Linoleic acid 3380-34-5, Triclosan 3486-35-9, Zinc carbonate 4773-96-0, Mangiferin 5508-58-7, Andrographolide 6147-11-1, Mangostin 6197-30-4, Octocrylene 6205-14-7, Hydroxycitric acid 6205-14-7D, Hydroxycitric acid, salts 6805-41-0, Escin 6829-55-6, Tocotrienol 6915-15-7, Malic acid 7440-47-3D, Chromium, complex with picolinic acid 7631-86-9, Silica, biological studies 8011-96-9, Calamine 8063-16-9, Psyllium 9000-01-5, Gum arabic 9000-07-1, Carrageenan 9000-40-2, Locust bean gum 9000-69-5, Pectin 9002-18-0, Agar 9002-72-6, Somatotropin **9002-88-4**, Polyethylene 9004-34-6, Cellulose, biological studies 9004-34-6D, Cellulose, derivs. 9004-61-9, Hyaluronic acid 9005-25-8, Starch, biological studies 9005-25-8D, Starch, derivs. 9005-38-3, Algin

9005-80-5D, Inulin, hydrolyzed 9006-65-9, Dimethicone 9012-76-4,  
 Chitosan 9016-00-6, Polydimethyl siloxane 9088-07-7, Natriuretic  
 peptide 10216-17-8, Hydroxytetronic acid 11138-66-2, Xanthan gum  
 12001-76-2, Vitamin B 12001-79-5, Vitamin K 13106-41-7  
 13463-18-8, Glutathione ascorbate 13463-67-7, Titanium oxide,  
 biological studies 16397-78-7, 2-Ethylhexyl cinnamate  
 16589-24-5, Synephrine 16830-15-2, Asiaticoside 17463-61-5  
**17941-34-3, Aleuritic acid** 20283-92-5,  
 Rosmarinic acid 29593-08-6 31692-79-2, Dimethiconol  
 31900-57-9, Polydimethyl siloxane 32619-42-4, Oleuropein  
 36062-04-1, Tetrahydrocurcumin 55306-04-2, Sericoside  
 56996-83-9, Phaseolamin 57448-83-6 59219-65-7, Darutoside  
 66575-29-9, Forskolin 70356-09-1, Avobenzone 71010-52-1, Gellan  
 gum 94231-35-3 125913-31-7 135322-32-6, Chitosan ascorbate  
 174882-69-0, Pycnogenol 211504-83-5 439666-13-4 676608-06-3  
 676608-07-4 676608-08-5 683226-75-7 697291-65-9, Phytosan  
 728945-82-2, Azaftig  
 (skin firming anti-aging cosmetic compns.)

L36 ANSWER 6 OF 21 HCA COPYRIGHT 2006 ACS on STN

141:76379 Lanolin-free cosmetic compositions containing an aromatic ester of a hydroxy fatty acid. Filippi, Vanina; Salem, Sophie; Auguste, Frederic (L'oreal, Fr.). Fr. Demande FR 2848823 A1 20040625, 24 pp. (French). CODEN: FRXXBL. APPLICATION: FR 2002-16533 20021223.

AB A cosmetic makeup compn. free from lanolin or its derivs. contains at least a liq. ester resulting from the esterification of an arom. acid with a hydroxy fatty acid. This compn. makes it possible to give a shining deposit on keratins. The aliph. hydroxy compd. is a hydroxy fatty acid such as ricinoleic acid or hydroxystearic acid. The compn. contains a pasty compd. having a hardness at 25° ranging 0.001-0.5 MPa, preferably 0.002-0.4 MPa, and whose liq. fraction at 23° lies between 9 and 97% in wt. Thus, a rouge formulation contained Finsolv BCO 22, Elfacos ST9 11, 2-decyldodecanoic acid triglyceride 20, hydrogenated **polyisobutene** 10, diisostearyl malate 11, **polybutylene** 2.5, octacosanyl stearate 5, triglyceride mixt. from lauric, myristic, palmitic, and stearic acids 2, **polyethylene** wax 5, and modified Hectorite 3%, pigments and preservatives and perfume qs.

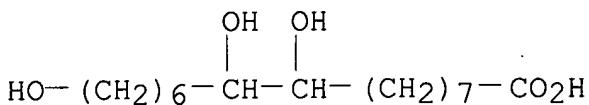
IT **6949-98-0D, Aleuritic acid, esters**

**9003-29-6, Polybutylene**

(lanolin-free cosmetic compn. contg. arom. esters of hydroxy fatty acids)

RN 6949-98-0 HCA

CN Hexadecanoic acid, 9,10,16-trihydroxy- (7CI, 8CI, 9CI) (CA INDEX NAME)



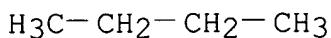
RN 9003-29-6 HCA  
 CN Butene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 25167-67-3  
 CMF C4 H8  
 CCI IDS

CM 2

CRN 106-97-8  
 CMF C4 H10



IC ICM A61K007-027  
 ICS A61K007-02; A61K007-06; A61K007-043; A61K007-32; A61K007-42;  
 A61K007-48

CC 62-4 (Essential Oils and Cosmetics)  
 IT Fluoropolymers, biological studies  
 Polyesters, biological studies

**Polyolefins**

Polyoxyalkylenes, biological studies

Polysiloxanes, biological studies

Waxes

(lanolin-free cosmetic compn. contg. arom. esters of hydroxy fatty acids)

IT 50-21-5D, Lactic acid, esters 57-10-3D, Hexadecanoic acid, esters 57-11-4D, Octadecanoic acid, esters 65-85-0D, Benzoic acid, esters with hydroxy fatty acids 69-72-7D, Salicylic acid, esters with hydroxy fatty acids 77-92-9D, Citric acid, esters 79-10-7D, Acrylic acid, alkyl esters, polymers 79-14-1D, Glycolic acid, esters 79-41-4D, MethAcrylic acid, alkyl esters, polymers 87-69-4D, Tartaric acid, esters 88-12-0D, polymers 89-05-4D, Pyromellitic acid, esters with hydroxy fatty acids 100-21-0D, Terephthalic acid, esters with hydroxy fatty acids 103-82-2D, Phenylacetic acid, esters with hydroxy fatty acids 106-14-9D, 12-Hydroxyoctadecanoic acid, esters 111-14-8D, Heptanoic acid, esters 112-05-0D, Nonanoic acid, esters 112-37-8D, Undecanoic acid, esters 112-85-6D, Docosanoic acid, esters 120-87-6D, 9,10-Dihydroxyoctadecanoic acid, esters 124-07-2D, Octanoic acid,

esters 139-44-6, Glyceryl tris( 12-hydroxystearate) 141-22-0D, Ricinoleic acid, esters 142-62-1D, Hexanoic acid, esters 143-07-7D, Dodecanoic acid, esters 149-57-5D, 2-Ethylhexanoic acid, esters 151-13-3, Butyl ricinoleate 334-48-5D, Decanoic acid, esters 498-36-2D, Leucic acid, esters 501-52-0D, 3-Phenylpropanoic acid, esters with hydroxy fatty acids 506-12-7D, Heptadecanoic acid, esters 506-13-8D, Juniperic acid, esters 506-30-9D, Eicosanoic acid, esters 528-44-9D, Trimellitic acid, esters with hydroxy fatty acids 544-63-8D, Tetradecanoic acid, esters 621-82-9D, Cinnamic acid, esters with hydroxy fatty acids 629-22-1D,  $\alpha$ -Hydroxyoctadecanoic acid, esters 638-53-9D, Tridecanoic acid, esters 646-30-0D, Nonadecanoic acid, esters 1002-84-2D, Pentadecanoic acid, esters 1323-03-1, Myristyl lactate 2363-71-5D, HenEicosanoic acid, esters 2540-54-7, Glyceryl triricinoleate 4130-35-2, Tridecyl trimellitate 4444-16-0D, esters 6250-72-2D, Isoarachidic acid, esters 6915-15-7D, Malic acid, esters **6949-98-0D, Aleuritic acid**, esters 9003-11-6 9003-27-4D, **Polyisobutylene**, hydrogenated **9003-29-6, Polybutylene** 10401-55-5, Cetyl ricinoleate 13893-40-8D, esters 14450-05-6, Pentaerythritol tetrapelargonate 25754-87-4D, 9,12-DiHydroxyoctadecanoic acid, esters 26699-71-8, Glyceryl adipate 29710-25-6, 2-Ethylhexyl 12-hydroxystearate 30399-84-9D, Isostearic acid, esters 37309-58-3, Polydecene 37309-58-3D, Polydecene, hydrogenated 42131-28-2, Isostearyl lactate 42175-36-0, Oleyl lactate 59231-36-6, Isodecyl 12-hydroxystearate 61332-02-3, Glyceryl isostearate 65591-14-2, Arachidyl propionate 68796-52-1D, esters 73572-07-3D, esters 77035-99-5, Hexadecene-Vinylpyrrolidone copolymer 81230-05-9, Diisostearyl malate 92232-12-7 93803-89-5 94689-35-7 95268-26-1 112385-10-1, Octyldodecyl lactate 113431-54-2, Triisostearyl citrate 187887-27-0 199277-59-3 220716-31-4 301824-14-6 337975-97-0D, esters 338450-65-0D, esters 338450-66-1D, esters 375375-69-2 710306-06-2 710306-07-3 710320-46-0 710320-47-1 710320-48-2 710320-49-3 710320-50-6D, esters (lanolin-free cosmetic compn. contg. arom. esters of hydroxy fatty acids)

L36 ANSWER 7 OF 21 HCA COPYRIGHT 2006 ACS on STN

141:28686 Pharmaceutical composition for transdermal or transmucosal administration comprising at least one progestin and/or at least one estrogen, process for preparing it and uses thereof. Masini-Eteve, Valerie; Taravella, Brigitte (Besins International Belgique, Bulg.).

U.S. Pat. Appl. Publ. US 2004110732 A1 **20040610**, 8 pp.

(English). CODEN: USXXCO. APPLICATION: US 2003-393077 20030320.

PRIORITY: FR 2002-15586 20021210.

AB The present invention relates to a novel pharmaceutical compn. for transdermal or transmucosal administration, comprising at least one

progesterin, and/or at least one estrogen, at least one percutaneous absorption promoter which is a hydroxy acid or a pharmaceutically acceptable salt of a hydroxy acid. The compn. is administered to treat physiol. conditions, such as disorders of the cycle or disruptions in the menstrual regularity, premenstrual syndrome, mastodynia, functional ovarian cysts, mittelschmertz syndrome, and dysmenorrhea. For example, a gel was formulated contg. gestodene 0.06, 17 $\beta$ -estradiol 0.12, 95 % ethanol 40, Carbopol 980 0.5, Lutrol F127 10, lactic acid 5, triethanolamine 1.5, and purified water balance to 100 %.

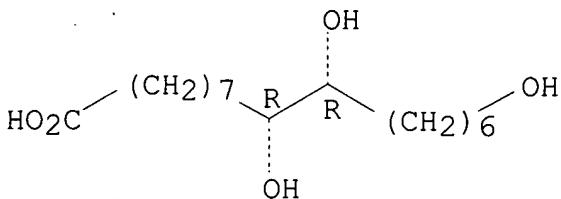
IT **17941-34-3, Aleuritic acid**

(transdermal or transmucosal compns. contg. progesterin and/or estrogen and absorption promoters)

RN 17941-34-3 HCA

CN Hexadecanoic acid, 9,10,16-trihydroxy-, (9R,10R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IC ICM A61K031-56

ICS A61K031-57; A61K031-19

INCL 514170000; 514557000

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 2

IT 50-21-5, Lactic acid, biological studies 50-27-1, Estriol  
50-28-2, 17 $\beta$ -Oestradiol, biological studies 53-16-7,  
Oestrone, biological studies 56-81-5, Glycerol, biological studies  
57-55-6, Propylene glycol, biological studies 57-63-6,  
Ethinylestradiol 64-17-5, Ethanol, biological studies 67-63-0,  
Isopropanol, biological studies 68-04-2, Sodium citrate 69-72-7,  
Salicylic acid, biological studies 74-79-3, Arginine, biological  
studies 76-93-7, biological studies 77-86-1, Tromethamine  
77-92-9, Citric acid, biological studies 79-14-1, Glycolic acid,  
biological studies 80-69-3, Tartronic acid 90-64-2, Mandelic  
acid 102-71-6, Triethanolamine, biological studies 124-68-5  
127-17-3, Pyruvic acid, biological studies 141-78-6, Ethyl  
acetate, biological studies 300-85-6,  $\beta$ -Hydroxybutyric acid  
320-77-4, Isocitric acid 473-81-4, Glyceric acid 552-63-6,  
Tropic acid 600-15-7,  $\alpha$ -Hydroxybutyric acid 617-73-2,  
 $\alpha$ -Hydroxyoctanoic acid 866-84-2, Potassium citrate

979-32-8, Estradiol valerate 1310-58-3, Potassium hydroxide, biological studies 1310-73-2, Sodium hydroxide, biological studies 1336-21-6, Ammonium hydroxide 6915-15-7, Malic acid 7558-79-4, Dibasic sodium phosphate 7558-80-7, Monobasic sodium phosphate 9004-64-2, Hydroxypropyl cellulose **17941-34-3**,

**Aleuritic acid** 25322-68-3, **Polyethylene** glycol 35189-28-7, Norgestimate 54024-22-5, Desogestrel 54048-10-1, 3-Ketodesogestrel 60282-87-3, Gestodene 106392-12-5, Poloxamer 110617-70-4, Poloxamine 138757-67-2, Carbopol 980 (transdermal or transmucosal compns. contg. progestin and/or estrogen and absorption promoters)

L36 ANSWER 8 OF 21 HCA COPYRIGHT 2006 ACS on STN

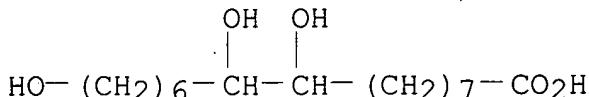
134:344360 Cosmetic composition comprising hydroxylated fatty acid ester. Arnaud, Pascal (L'oreal, Fr.). Eur. Pat. Appl. EP 1097699 A1 **20010509**, 26 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO. (French). CODEN: EPXXDW. APPLICATION: EP 2000-402958 20001025. PRIORITY: FR 1999-13812 19991104.

AB Cosmetic compn. comprising hydroxylated fatty acid esters, e.g. ricinoleic acid are claimed. Lipsticks contained dibenzoyl glyceryl ricinoleate 15.00, C12-15 alkyl benzoate 20.00, tridecyl trimellitate 15.00, phenyltrimethicone 5.00, diisostearyl malate 7.00, lanolin 13.00, preservative 0.10, **Polyethylene** wax 4.00, candelilla wax 7.00, carnauba wax 3.90, and pigments 10.00%.

IT **6949-98-0D, Aleuritic acid, esters**  
(cosmetic compn. comprising hydroxylated fatty acid ester)

RN 6949-98-0 HCA

CN Hexadecanoic acid, 9,10,16-trihydroxy- (7CI, 8CI, 9CI) (CA INDEX NAME)



IC ICM A61K007-027

CC 62-4 (Essential Oils and Cosmetics)

IT 50-21-5D, Lactic acid, esters 50-81-7, Vitamin c, biological studies 61-90-5D, L-Leucine, esters, biological studies 65-85-0D, Benzoic acid, esters, biological studies 69-72-7D, Salicylic acid, esters 77-92-9D, Citric acid, esters 79-14-1D, Glycolic acid, esters 81-13-0, D-Panthenol 87-69-4D, Tartaric acid, esters, biological studies 89-05-4D, Pyromellitic acid, esters 89-78-1, Menthol 97-59-6 98-92-0, Vitamin b3 100-21-0D, Terephthalic acid, esters 103-82-2D, Phenylacetic acid, esters 106-14-9, 12 Hydroxystearic acid 106-14-9D, 12 Hydroxy octadecanoic acid, esters 120-87-6D, 9,10 Dihydroxy octadecanoic

acid, esters 141-22-0D, Ricinoleic acid, esters 151-13-3, Butyl ricinoleate 501-52-0D, 3 Phenyl propionic acid, esters 506-13-8D, Juniperic acid, esters 515-69-5, Bisabolol 528-44-9D, Trimellitic acid, esters 621-82-9D, Cinnamic acid, esters 629-22-1D,  $\alpha$ -Hydroxy octadecanoic acid, esters 1323-03-1, Myristyl lactate 1406-18-4, Vitamin e 2540-54-7, Glyceryl triricinoleate 4444-16-0D, esters 6915-15-7D, Malic acid, esters **6949-98-0D, Aleuritic acid, esters**  
 10401-55-5, Cetyl ricinoleate 11103-57-4, Vitamin a 13893-40-8D, esters 25027-95-6D, 9,10,12-Trihydroxy octadecanoic acid, esters 25754-87-4D, 9-12 Dihydroxy octadecanoic acid, esters 29383-26-4 30306-47-9D, esters 42131-28-2D, Isostearyl lactate, esters 42175-36-0, Oleyl lactate 68796-52-1D, esters 112385-09-8, Diisostearyl maleate 112385-10-1, Octyl dodecyl lactate 113431-54-2, Triisostearyl citrate 126121-35-5 210628-77-6 308122-33-0 337975-97-0 338450-65-0D, esters 338450-66-1D, esters 338450-67-2 338450-68-3 338450-69-4 338450-70-7  
 (cosmetic compn. comprising hydroxylated fatty acid ester)

L36 ANSWER 9 OF 21 HCA COPYRIGHT 2006 ACS on STN

133:79034 Chemical peeling compositions containing L-ascorbic acid derivatives and chemical peeling method. Ito, Shinobu; Ogata, Eiji (Showa Denko K. K., Japan). Jpn. Kokai Tokyo Koho JP 2000186036 A2 **20000704**, 17 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1998-363316 19981221. PRIORITY: JP 1998-295169 19981016.

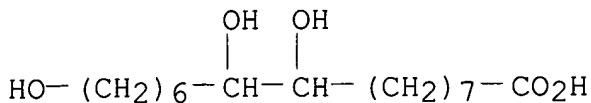
AB The compns., useful for treatment of wrinkle, spots, freckles, liver spot, acne, scars due to acne and burn, rough skin, pigmentation, decrease in elasticity of hair and nail, etc., contain chem. peeling agents, preferably, 2-hydroxycarboxylic acids or their derivs., and L-ascorbic acid (I) or its derivs. to prevent penetration of the agents to skin in depth and reduce skin irritation. A chem. peeling method involves application of a 1st agent contg. chem. peeling agents to skin and application of a 2nd agent contg. I or its derivs. once or several times before or after the 1st agents. A liq. contg. sorbitol 4.0, dipropylene glycol 6.0, **polyethylene** glycol 1500 5.0, polyoxyethylene oleyl ether 0.5, Me cellulose 0.2, citric acid 0.01, NaOH, Na L-ascorbic acid 2-phosphate 5.0, Na dl- $\alpha$ -tocopherol phosphate 0.5, glycolic acid 1.0, Cl<sub>3</sub>CCO<sub>2</sub>H 1.0%, and H<sub>2</sub>O balance was prep'd. Antiwrinkle effect and skin irritation-inducing action of the compn. was examd. in 100 volunteers.

IT **6949-98-0, Aleuritic acid**

(chem. peeling compns. contg. hydroxycarboxylic acids as active agents and L-ascorbic acid derivs. to reduce skin irritation)

RN 6949-98-0 HCA

CN Hexadecanoic acid, 9,10,16-trihydroxy- (7CI, 8CI, 9CI) (CA INDEX NAME)



IC ICM A61K031-375  
 ICS A61K007-00; A61P017-00; A61P017-10; A61P017-02; A61P017-16;  
 A61K031-19; A61K045-00  
 CC 62-4 (Essential Oils and Cosmetics)  
 Section cross-reference(s): 63  
 IT 50-21-5, biological studies 50-81-7, Ascorbic acid, biological  
 studies 50-81-7D, L-Ascorbic acid, derivs., biological studies  
 55-10-7 76-03-9, Trichloroacetic acid, biological studies  
 76-93-7, biological studies 77-92-9, biological studies 79-14-1,  
 biological studies 80-69-3, Tartronic acid 87-69-4, biological  
 studies 87-73-0, Saccharic acid 90-64-2, Mandelic acid  
 96-82-2, Lactobionic acid 127-17-3, Pyruvic acid, biological  
 studies 156-06-9, Phenylpyruvic acid 298-12-4, Glyoxylic acid  
 306-23-0 320-77-4, Isocitric acid 328-51-8, 2-Ketoctanoic acid  
 473-81-4, Glyceric acid 492-86-4 515-30-0, Atrolactic acid  
 526-95-4, D-Gluconic acid 526-99-8, Mucic acid 544-57-0,  
 Cerebronic acid 552-63-6, Tropic acid 594-61-6 597-44-4,  
 Citramalic acid 599-04-2, Pantoyl lactone 600-15-7,  
 2-Hydroxybutanoic acid 600-18-0, 2-Ketobutanoic acid 600-22-6,  
 Methyl pyruvate 611-73-4, Benzoylformic acid 617-31-2,  
 2-Hydroxypentanoic acid 617-35-6, Ethyl pyruvate 617-73-2,  
 2-Hydroxyoctanoic acid 629-22-1, 2-Hydroxyoctadecanoic acid  
 636-69-1, 2-Hydroxyheptanoic acid 666-99-9, Agaricic acid  
 764-67-0, 2-Hydroxyhexadecanoic acid 775-01-9 828-01-3  
 922-68-9 1112-33-0, Pantoic acid 1198-69-2 1198-84-1  
 1603-79-8, Ethyl benzoylformate 1713-85-5, 3-Chlorolactic acid  
 1821-02-9, 2-Ketopentanoic acid 2492-75-3, 2-Ketohexanoic acid  
 2507-55-3, 2-Hydroxytetradecanoic acid 2782-07-2 2984-55-6,  
 2-Hydroxydodecanoic acid 3063-04-5, Glucoheptonolactone  
 3327-63-7 3327-64-8, Gulonolactone 3695-24-7 3909-12-4,  
 Threonic acid 3956-93-2, Idonic acid 5393-81-7,  
 2-Hydroxydecanoic acid 6064-63-7, 2-Hydroxyhexanoic acid  
 6362-58-9 6613-41-8, Ethyl phenylpyruvate 6803-09-4 6906-37-2,  
 Mannonic acid 6915-15-7 **6949-98-0, Aleuritic acid** 7007-81-0, Trethocanic acid 10366-82-2  
 13088-48-7, 2-Ketoheptanoic acid 13382-27-9, Galactonic acid  
 13403-16-2, D-galacto-2-Heptulose 13752-83-5, Arabinonic acid  
 13752-84-6, Erythronic acid 15206-55-0, Methyl benzoylformate  
 15896-36-3, 2-Hydroxynonanoic acid 16742-48-6, 2-Hydroxyeicosanoic  
 acid 17812-24-7, Ribonic acid 17828-56-7, Xyloonic acid  
 19790-86-4, 2-Hydroxyundecanoic acid 20246-52-0, Talonic acid  
 20246-53-1, Gulonic acid 20279-43-0, Propyl pyruvate 23313-12-4,  
 L-Ascorbic acid 2-phosphate 23351-51-1, Glucoheptonic acid

24871-35-0, Altronic acid 28223-40-7, Lyxonic acid 28223-42-9,  
 Allonic acid 28700-18-7, Galacturonolactone 32449-92-6,  
 Glucuronolactone 36413-60-2, Quinic acid 38742-06-2, Hexulosonic  
 acid 41172-04-7, Methyl 2-ketoctanoate 66651-98-7, L-Ascorbic  
 acid 2-sulfate sodium salt 73572-07-3 80490-57-9,  
 2-Ketododecanoic acid 84309-23-9 84413-06-9 109620-90-8,  
 L-Ascorbic acid 2-phosphate sodium salt 129499-78-1, L-Ascorbic  
 acid 2-glucoside 215363-36-3 215363-39-6 217483-97-1  
 279678-78-3 279684-13-8

(chem. peeling compns. contg. hydroxycarboxylic acids as active  
 agents and L-ascorbic acid derivs. to reduce skin irritation)

L36 ANSWER 10 OF 21 HCA COPYRIGHT 2006 ACS on STN

129:15980 An expedient synthesis of the sugarcane borer pheromone  
 components. Subbaraman, Ayalur S.; Mithran, Sethuram; Mamdapur,  
 Vasant R. (Bio-Organic Division, Bhabha Atomic Research Centre,  
 Bombay, 400 085, India). Molecules [Electronic Publication], 3(2),  
 35-40 (English) **1998**. CODEN: MOLEFW. ISSN: 1420-3049.  
 URL: <http://mdpi.org./molecules/papers/30200035.pdf> Publisher:  
 Molecular Diversity Preservation International.

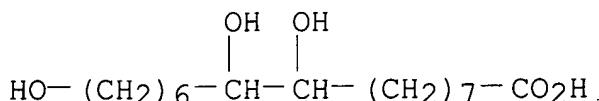
AB A practical synthesis of the title compds. has been developed. The  
 salient features of the synthesis are (1) use of easily accessible  
 starting materials viz. **aleuritic acid**,  
 10-undecenoic acid, cycloheptanone etc. and (2) fixation of the  
 required **olefinic** geometry via Wittig and acetylenic  
 routes.

IT **6949-98-0P**

(expedient synthesis of sugarcane borer pheromone components)

RN 6949-98-0 HCA

CN Hexadecanoic acid, 9,10,16-trihydroxy- (7CI, 8CI, 9CI) (CA INDEX  
 NAME)



CC 26-2 (Biomolecules and Their Synthetic Analogs)

IT 1931-63-1P, Methyl 8-formyloctanoate 3710-42-7P,

7-Hydroxyheptanoic acid **6949-98-0P** 14811-73-5P, Methyl  
 9-formylnonanoate 21406-61-1P, Pentyltriphenylphosphonium bromide  
 24724-06-9P, Methyl 10,11-dihydroxyundecanoate 30009-42-8P  
 30515-28-7P, 7-Bromoheptanoic acid 32779-22-9P 35153-15-2P,  
 (Z)-9-Tetradecen-1-ol 55182-89-3P, 8-Tridecynoic acid  
 56219-06-8P, Methyl (Z)-9-tetradecenoate 64437-42-9P,  
 (Z)-Pentadec-10-en-1-ol 64502-56-3P, (Z)-8-Tridecen-1-ol  
 90176-52-6P 207796-76-7P 207796-77-8P, 8-Tridecyn-1-ol  
 (expedient synthesis of sugarcane borer pheromone components)

L36 ANSWER 11 OF 21 HCA COPYRIGHT 2006 ACS on STN

128:208784 Cosmetic and/or dermatological acid composition containing poly(2-acrylamido-2-methylpropane sulfonic acid) crosslinked and neutralized to at least 90%. Dupuis, Christine; Hansenne, Isabelle; Maubru, Mireille; Sebillotte, Arnaud Laurence; Lorant, Raluca (L'Oreal S. A., Fr.). Fr. Demande FR 2750326 A1 **19980102**, 19 pp. (French). CODEN: FRXXBL. APPLICATION: FR 1996-8108 19960628.

AB Cosmetic and/or dermatol. compns. having an aq. acid medium contain  $\geq 1$  poly(2-acrylamido-2-methylpropanesulfonate) which is crosslinked and  $\geq 90\%$  neutralized. The compns. are characterized in that the pH of the aq. medium  $\leq 5$  and preferably 1-4 and the polymer is crosslinked with  $\geq 1$  monomer having  $\geq 2$  **olefinic** double bonds. The compns. may be used in shampoos or hair-care products; hygienic products; cosmetics; sunscreens; non-therapeutic cosmetics for the skin, scalp, eyelashes, eyebrows, nails or mucus membranes; or non-therapeutic products for depigmentation of the face or body. The compns. may also be used to thicken or form gels for dermatol. ointments. Thus, 2-acrylamido-2-methylpropanesulfonic acid was polymd. and neutralized with NH<sub>3</sub> and then crosslinked with trimethylolpropane triacrylate to give a neutralized crosslinked polymer having hydrodynamic radius 440 nm. The prepd. crosslinked polymer was used to prep. a thick, transparent stable gel sunscreen.

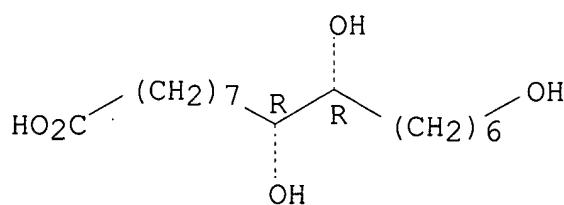
IT **17941-34-3, Aleuritic acid**

(active org. acid; neutralized crosslinked poly(acrylamidomethylpropanesulfonate) for cosmetic and/or dermatolog. compns. in aq. acid medium)

RN 17941-34-3 HCA

CN Hexadecanoic acid, 9,10,16-trihydroxy-, (9R,10R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IC ICM A61K007-48

ICS A61K007-06; A61K007-02; A61K007-42; A61K007-16; A61K009-06; A61K047-32; A61K007-04

CC 62-4 (Essential Oils and Cosmetics)  
Section cross-reference(s): 37, 38, 63

IT 50-81-7, Ascorbic acid, biological studies 65-85-0, Benzoic acid, biological studies 69-72-7D, Salicylic acid, derivs. 77-92-9, Citric acid, biological studies 80-69-3, Tartronic acid 87-69-4, Tartaric acid, biological studies 90-64-2, Mandelic acid 104-98-3, Urocanic acid 110-17-8, Fumaric acid, biological studies 302-79-4D, Retinoic acid, derivs. 331-39-5 501-30-4, Kojic acid 526-95-4, Gluconic acid 685-73-4, Galacturonic acid 828-01-3 6915-15-7, Malic acid 17812-24-7, Ribonic acid **17941-34-3**, **Aleuritic acid** 27503-81-7, 2-Phenylbenzimidazole-5-sulfonic acid 56039-58-8 92761-26-7 (active org. acid; neutralized crosslinked poly(acrylamidomethylpropanesulfonate) for cosmetic and/or dermatolog. compns. in aq. acid medium)

L36 ANSWER 12 OF 21 HCA COPYRIGHT 2006 ACS on STN  
 124:145661 Reactions of **olefinic** ester derivatives of **aleuritic acid**. Part II. Synthesis of 5'-methyltetrazoles. Sarkar, P. C.; Agarwal, S. C. (Chem. Div., Indian Lac Res. Inst., Nankum/Ranchi, 834 010, India). Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry, 34B(12), 1080-2 (English) **1995**. CODEN: IJSBDB. ISSN: 0376-4699. Publisher: Publications & Information Directorate, CSIR.

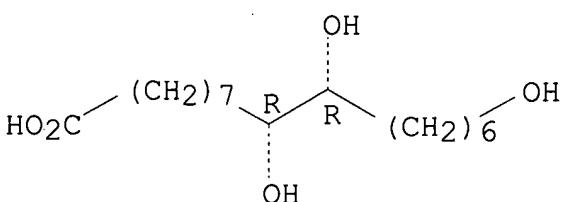
AB Me 16-acetoxy-threo-9/10-bromo-10/9-(5-methyl-1H-tetrazol-1-yl) hexadecanoate and Me 16-acetoxy-9/10-(5-methyl-1H-tetrazol-1-yl)hexadec-9(E)-enoate have been prepd. from Me 16-acetoxyhexadec-9(Z)-enoate, obtained from the naturally occurring threo-**aleuritic acid**.

IT **17941-34-3**, DL-threo-**Aleuritic acid**  
 (prepn. of methyltetrazoles from **aleuritic acid**)

RN 17941-34-3 HCA

CN Hexadecanoic acid, 9,10,16-trihydroxy-, (9R,10R)-rel- (9CI) (CA INDEX NAME)

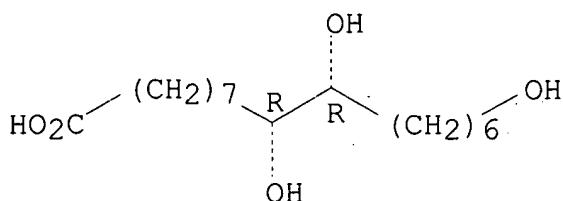
Relative stereochemistry.



IT **17941-34-3P**  
 (prepn. of methyltetrazoles from **aleuritic acid**)

RN 17941-34-3 HCA  
 CN Hexadecanoic acid, 9,10,16-trihydroxy-, (9R,10R)-rel- (9CI) (CA  
 INDEX NAME)

Relative stereochemistry.



CC 26-3 (Biomolecules and Their Synthetic Analogs)  
 IT **17941-34-3**, DL-threo-Aleuritic acid  
 (prepn. of methyltetrazoles from aleuritic acid  
 )  
 IT 1619-68-7P **17941-34-3P** 53837-83-5P 57491-60-8P,  
 173468-86-5P 173468-88-7P  
 (prepn. of methyltetrazoles from aleuritic acid  
 )  
 IT 173468-87-6P 173468-89-8P  
 (prepn. of methyltetrazoles from aleuritic acid  
 )

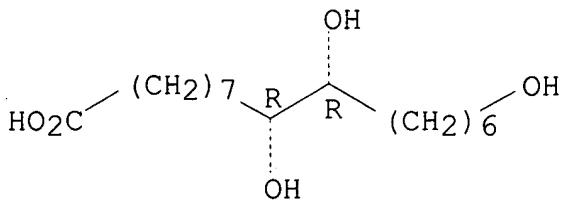
L36 ANSWER 13 OF 21 HCA COPYRIGHT 2006 ACS on STN  
 124:37378 Cosmetic and/or dermatological composition containing a cationic polymeric gelling agent and its uses for skin depigmentation. Arnaud-Sebillotte, Laurence; Segot, Evelyne (Oreal S. A., Fr.). Eur. Pat. Appl. EP 680748 A1 **19951108**, 11 pp. DESIGNATED STATES: R: DE, ES, FR, GB, IT. (French). CODEN: EPXXDW. APPLICATION: EP 1995-400691 19950328. PRIORITY: FR 1994-5538 19940505.

AB Cosmetic compns. contg. cationic polymeric gelling agents are used for skin depigmentation. A gel for depigmentation of skin contained 96° EtOH 30%, ethoxylated PEG 30, kojic acid 1, caffeic acid 1.2, n-octanoyl-5-salicylic acid 1.5, ethoxylated polydimethyl siloxane 2, Salcare SC 95 5, and water q.s. 100%.

IT **17941-34-3**, Aleuritic acid  
 (cosmetic compns. contg. cationic polymeric gelling agents for skin depigmentation)

RN 17941-34-3 HCA  
 CN Hexadecanoic acid, 9,10,16-trihydroxy-, (9R,10R)-rel- (9CI) (CA  
 INDEX NAME)

Relative stereochemistry.



IC ICM A61K007-48

CC 62-4 (Essential Oils and Cosmetics)

IT 50-81-7, Ascorbic acid, biological studies 65-85-0, Benzoic acid, biological studies 69-72-7, Salicylic acid, biological studies 77-92-9, Citric acid, biological studies 79-14-1, Glycolic acid, biological studies 80-69-3, Tartronic acid 87-69-4, Tartaric acid, biological studies 90-64-2, Mandelic acid 110-17-8, Fumaric acid, biological studies 127-17-3, Pyruvic acid, biological studies 302-79-4, Retinoic acid 331-39-5 501-30-4, Kojic acid 526-95-4, Gluconic acid 544-57-0, 2-Hydroxytetacosanoic acid 600-15-7, 2-Hydroxybutanoic acid 617-31-2, 2-Hydroxypentanoic acid 617-73-2, 2-Hydroxyoctanoic acid 629-22-1, 2-Hydroxyoctadecanoic acid 636-69-1, 2-Hydroxyheptanoic acid 685-73-4, Galacturonic acid 764-67-0, 2-Hydroxyhexadecanoic acid 828-01-3 2507-55-3, 2-Hydroxytetradecanoic acid 2984-55-6, 2-Hydroxydodecanoic acid 5393-81-7, 2-Hydroxydecanoic acid 6064-63-7, 2-Hydroxyhexanoic acid 6556-12-3, Glucuronic acid 6915-15-7, Malic acid 15896-36-3, 2-Hydroxynonanoic acid 16742-48-6, 2-Hydroxyeicosanoic acid 17812-24-7, Ribonic acid **17941-34-3, Aleuritic acid** 19790-86-4, 2-Hydroxyundecanoic acid 25154-86-3, Dimethylaminoethyl methacrylate homopolymer 26161-33-1, Salcare SC 95 78418-01-6, 5-Octanoylsalicylic acid 92761-26-7  
 (cosmetic compns. contg. cationic polymeric gelling agents for skin depigmentation)

IT 50-70-4, Sorbitol, uses 57-55-6D, Propylene glycol, ester 57-55-6D, Propylene glycol, ethers 652-67-5D, Isosorbide, alkyl derivs. 25322-68-3D, **Polyethylene** glycol, ethoxylated  
 (cosmetic compns. contg. cationic polymeric gelling agents for skin depigmentation)

L36 ANSWER 14 OF 21 HCA COPYRIGHT 2006 ACS on STN

124:15278 Cosmetic and/or dermatologic skin depigmentation compositions containing crosslinked anionic polymers as gelling agents.  
 Arnaud-Sebillotte, Laurence; Segot, Evelyne (Oreal S. A., Fr.).  
 Eur. Pat. Appl. EP 679388 A1 **19951102**, 11 pp. DESIGNATED STATES: R: DE, ES, FR, GB, IT. (French). CODEN: EPXXDW.  
 APPLICATION: EP 1995-400651 19950323. PRIORITY: FR 1994-4603 19940418.

AB Cosmetic and/or dermatol. skin depigmentation compns. contain a

gelling agent formed from acrylamide-2-acrylamino-2-methylpropane sulfonic acid copolymer and a polyunsatd. **olefin** as crosslinking agent. A gel contained cetyl alc. 30, ethoxylated PEG 30, kojic acid 1, caffeic acid 1.2, octanoyl-5-salicylic acid 1.5, ethoxylated polydimethylsiloxane 2, sodium 2-acrylamino-2-Me propane sulfonic acid-acrylamide-methylenebisacrylamide- copolymer 5, and water q.s. 100.

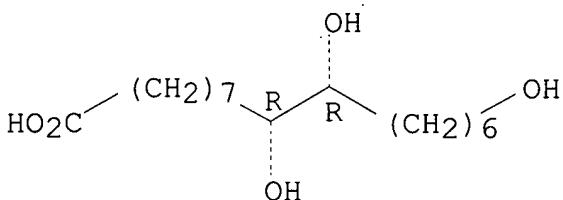
IT **17941-34-3, Aleuritic acid**

(cosmetic and/or dermatol. skin depigmentation compns. contg. crosslinked anionic polymers as gelling agents)

RN 17941-34-3 HCA

CN Hexadecanoic acid, 9,10,16-trihydroxy-, (9R,10R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IC ICM A61K007-48

CC 62-4 (Essential Oils and Cosmetics)

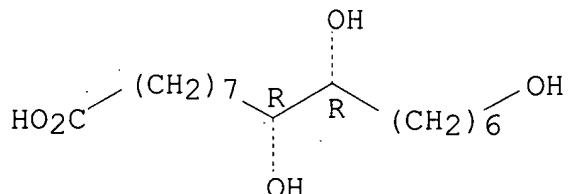
IT 50-70-4, D-Glucitol, biological studies 50-81-7, Ascorbic acid, biological studies 57-55-6D, 1,2-Propanediol, ethers and esters 65-85-0, Benzoic acid, biological studies 69-72-7, biological studies 77-92-9, biological studies 79-14-1, biological studies 80-69-3, Tartronic acid 87-69-4, biological studies 90-64-2, Mandelic acid 110-17-8, Fumaric acid, biological studies 127-17-3, Pyruvic acid, biological studies 302-79-4, Retinoic acid 331-39-5 501-30-4, Kojic acid 526-95-4, Gluconic acid 600-15-7, 2-Hydroxybutanoic acid 617-31-2, Hydroxy-2-pentanoic acid 617-73-2, Hydroxy-2-octanoic acid 629-22-1, Hydroxy-2-octadecanoic acid 636-69-1, Hydroxy-2-heptanoic acid 652-67-5D, Isosorbide, alkyl derivs. 685-73-4, Galacturonic acid 764-67-0, Hydroxy-2-hexadecanoic acid 828-01-3 2507-55-3, Hydroxy-2-tetradecanoic acid 2984-55-6, Hydroxy-2-dodecanoic acid 5393-81-7, Hydroxy-2-decanoic acid 6064-63-7, Hydroxy-2-hexanoic acid 6556-12-3, Glucuronic acid 6915-15-7, Malic acid 15896-36-3, Hydroxy-2-nonanoic acid 16742-48-6, Hydroxy-2-eicosanoic acid 17812-24-7, Ribonic acid  
**17941-34-3, Aleuritic acid** 19790-86-4, Hydroxy-2-undecanoic acid 25322-68-3D, esters 53609-62-4 92761-26-7 171409-66-8 (cosmetic and/or dermatol. skin depigmentation compns. contg.

crosslinked anionic polymers as gelling agents)

L36 ANSWER 15 OF 21 HCA COPYRIGHT 2006 ACS on STN  
 119:49125 Reactions of **olefinic** ester derivatives of  
**aleuritic acid** with iodonium nitrate. Agarwal, S.  
 C.; Rajendran, I. (Div. Chem., Indian Lac Res. Inst., Ranchi, 834  
 010, India). Indian Journal of Chemistry, Section B: Organic  
 Chemistry Including Medicinal Chemistry, 32B(4), 487-8 (English)  
**1993.** CODEN: IJSBDB. ISSN: 0376-4699. OTHER SOURCES:  
 CASREACT 119:49125.

AB Me threo-16-acetoxy-9 (10)-iodo-10(9)-nitratohexadecanoate and Me  
 threo-16-acetoxy-9(10)-iodo-10(9)-hydroxyhexadecanoate were prepd.  
 by treating Me 16-acetoxyhexdec-cis-9-enoate (VI) which in turn has  
 been prepd. from threo-**aleuritic acid** with  
 iodonium nitrate (generated in situ).  
 IT **17941-34-3**, threo-**Aleuritic acid**  
 (nitration of)  
 RN 17941-34-3 HCA  
 CN Hexadecanoic acid, 9,10,16-trihydroxy-, (9R,10R)-rel- (9CI) (CA  
 INDEX NAME)

Relative stereochemistry.

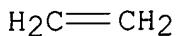


CC 26-9 (Biomolecules and Their Synthetic Analogs)  
 Section cross-reference(s): 23  
 ST **aleuritic acid** ester reaction iodonium nitrate;  
 nitration **aleuritic acid** ester; hexadecanoate  
 iodo nitro hydroxy prepn  
 IT Nitration  
 (of **aleuritic acid** with iodonium nitrate)  
 IT Nitration  
 (regioselective, agents, iodonium nitrate, for **aleuritic acid**)  
 IT 14696-81-2, Iodonium nitrate  
 (nitration agent for **aleuritic acid** ester)  
 IT **17941-34-3**, threo-**Aleuritic acid**  
 (nitration of)  
 IT 148517-13-9P 148517-14-0P 148517-15-1P 148517-16-2P  
 (prepn. of, from **aleuritic acid**)

L36 ANSWER 16 OF 21 HCA COPYRIGHT 2006 ACS on STN  
 112:76661. Synthesis of (Z)-7-tetradecenyl acetate and sec-butyl (Z)-7-tetradecenoate from **aleuritic acid**.  
 Subramanian, G. B. V.; Sharma, Rajiv (Dep. Chem., Univ. Delhi, Delhi, 110 007, India). Synthetic Communications, 19(7-8), 1197-202 (English) 1989. CODEN: SYNCAN. ISSN: 0039-7911. OTHER  
 SOURCES: CASREACT 112:76661.

AB **Aleuritic acid**, after acetylation, was oxidatively decarboxylated and then subjected to phase-transfer oxidn. of the terminal **olefin** to give 7,8,14-trihydroxytetradecanoic acid. Simple conventional methods then led to the title pheromones.  
 CC 26-2 (Biomolecules and Their Synthetic Analogs)  
 ST tetradecenyl acetate; tetradecenoate; **aleuritic acid** synthon pheromone  
 IT 16974-10-0P 83005-39-4P  
 (prepn. of, from **aleuritic acid**)

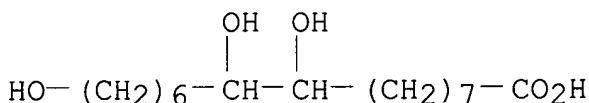
L36 ANSWER 17 OF 21 HCA COPYRIGHT 2006 ACS on STN  
 104:205774 Comparative examinations of the apple variety Jonagold and its parents Jonathan and Golden Delicious. Neubeller, J.; Buchloh, G. (Inst. Obst-, Gemuese- und Weinbau, Univ. Hohenheim, Stuttgart, D-7000, Fed. Rep. Ger.). Mitteilungen Klosterneuburg, 36(1), 34-46 (German) 1986. CODEN: MIKLD4. ISSN: 0250-4944.  
 AB The fruit pulp and skin of Jonagold, Jonathan, and Golden Delicious apples were studied. The compactness of pulp and skin changed rapidly during maturation in all 3 varieties. Jonagold had a medium decrease in wt. from water losses under lab. conditions. The wax content was low with young fruit; Jonagold had a medium skin wax content. The major paraffin was nonacosane (C29) [630-03-5], which was 46% in Jonagold. There were more unsatd. fatty acids than satd. ones, and Jonagold was more like Golden Delicious than Jonathan. Jonagold had a medium wt. of membrane. In the cutin 9,10,18-trihydroxystearic acid [496-86-6] and 10,16-dihydroxyhexadecanoic acid [3233-90-7] were the main components. Jonagold had a medium acidity, and malic acid [6915-15-7] was 93-95% of the total. The total sugar content of the pulp was 36-72% dry substance according to variety and stage of development. The highest amt. of aroma substances were produced by Jonagold. The organoleptic judgement shows more compact fruit pulp in Jonagold, and the taste was a refreshing-harmonic one compared to those of its parents.  
 IT **74-85-1**, biological studies  
 (of apple aroma, variety in relation to)  
 RN 74-85-1 HCA  
 CN Ethene (9CI) (CA INDEX NAME)

IT **6949-98-0**

(of apple cutin, variety in relation to)

RN 6949-98-0 HCA

CN Hexadecanoic acid, 9,10,16-trihydroxy- (7CI, 8CI, 9CI) (CA INDEX NAME)



CC 17-10 (Food and Feed Chemistry)

Section cross-reference(s): 11

IT 64-17-5, biological studies 66-25-1 67-56-1, biological studies  
 71-23-8, biological studies **74-85-1**, biological studies  
 75-07-0, biological studies 79-20-9 97-62-1 97-87-0 105-37-3  
 105-53-3 105-54-4 105-66-8 106-27-4 107-31-3 107-87-9  
 108-21-4 109-21-7 109-60-4 109-66-0, biological studies  
 109-94-4 110-38-3 110-54-3, biological studies 110-74-7  
 111-70-6 111-87-5, biological studies 112-31-2 112-42-5  
 123-29-5 123-66-0 123-86-4 123-92-2 123-96-6 124-19-6  
 141-78-6, biological studies 142-82-5, biological studies  
 142-92-7 539-82-2 540-18-1 543-49-7 556-24-1 590-01-2  
 598-75-4 623-42-7 624-24-8 625-55-8 626-89-1 626-93-7  
 628-63-7 868-57-5 928-95-0 1120-21-4 2173-56-0 2349-07-7  
 6032-29-7 6728-26-3 20487-40-5 62309-51-7  
 (of apple aroma, variety in relation to)

IT 106-14-9 496-86-6 506-13-8 638-26-6 2984-55-6 3233-90-7  
**6949-98-0** 19790-87-5 31328-13-9 35535-38-7  
 35535-39-8  
 (of apple cutin, variety in relation to)

L36 ANSWER 18 OF 21 HCA COPYRIGHT 2006 ACS on STN

102:5661 Phosphonium iodide in organic synthesis. Chatterjea, J. N.; Majee, R. N.; Mukherjee, S. N. (Div. Chem., Indian Lac Res. Inst., Namkum, 834 010, India). Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry, 23B(8), 733-5 (English) **1984**. CODEN: IJSBDB. ISSN: 0376-4699.

AB Ph<sub>3</sub>P.HI is useful in the stereospecific conversion of some vicinal diols to **olefins**. Synthesis of cis-hexadec-9-enolide has been achieved by treating erythro-**aleuritic acid** with Ph<sub>3</sub>P.HI in HOAc and lactonizing the resulting 16-hydroxy-cis-hexadec-9-enoic acid.

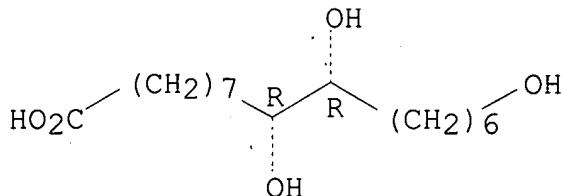
IT **17941-34-3**

(dehydration of, by phosphonium iodide)

RN 17941-34-3 HCA

CN Hexadecanoic acid, 9,10,16-trihydroxy-, (9R,10R)-rel- (9CI) (CA  
INDEX NAME)

Relative stereochemistry.



CC 23-16 (Aliphatic Compounds)

Section cross-reference(s): 26

IT 533-87-9 2391-05-1 3639-32-5 13985-16-5 14073-16-6  
**17941-34-3** 59612-63-4

(dehydration of, by phosphonium iodide)

L36 ANSWER 19 OF 21 HCA COPYRIGHT 2006 ACS on STN

75:153036 Coating and printing compositions for **polypropylene**  
molded products. Mihara, Kazuyuki (Mitsubishi Petrochemical Co.,  
Ltd.). Jpn. Tokkyo Koho JP 45041513 B4 **19701226** Showa, 3  
pp. (Japanese). CODEN: JAXXAD. APPLICATION: JP 19650220.AB A coating compn. contg. linoleic **acid**-modified  
**aleuritic acid** pentaerythritol ester showed good  
adhesion on **polypropylene** moldings. For example, a white  
enamel was prep'd. from TiO<sub>2</sub>, the ester, Al rosin salt, and a  
chlorinated rubber.IT **9003-07-0**, uses and miscellaneous  
(coatings on molded products of, of **aleuritic**  
**acid** esters-chlorinated rubber, for improved adhesion)

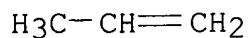
RN 9003-07-0 HCA

CN 1-Propene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 115-07-1

CMF C3 H6



IC C09D; C09F; B29C

CC 42 (Coatings, Inks, and Related Products)

ST aleuritate coating **polypropylene**

IT Rubber, chlorinated  
 (coatings, contg. linoleic **acid**-modified  
**aleuritic acid** pentaerythritol ester, on  
**propylene polymer** molded products)

IT Coating materials  
 (linoleic **acid**-modified **aleuritic acid**  
 pentaerythritol ester, contg. chlorinated rubber, on  
**propylene polymer** molded products)

IT Hexadecanoic acid, 9,10,16-trihydroxy-, pentaerythritol ester  
 (coatings, contg. chlorinated rubber, on **propylene polymer**  
 molded products)

IT 9003-07-0, uses and miscellaneous  
 (coatings on molded products of, of **aleuritic acid**  
 esters-chlorinated rubber, for improved adhesion)

L36 ANSWER 20 OF 21 HCA COPYRIGHT 2006 ACS on STN

54:109978 Original Reference No. 54:20866i,20867a-i,20868a-c Organic reactions in strong alkalis. IV. Rearrangement and fission of acids with  $\alpha$ -glycol and other vicinal oxygen functions. Dytham, R. A.; Weedon, B. C. L. (Imp. Coll. Sci. Technol., London). Tetrahedron, 9, 246-53 (Unavailable) 1960. CODEN: TETRAB.

ISSN: 0040-4020.

AB cf. CA 54, 19471a. On treatment with strong alkali threo-(I) and erythro-9,10-dihydroxystearic acids (II) and the corresponding hydroxyoxo (III) and dioxo acids (IV) gave high yields of  $\alpha$ -hydroxy- $\alpha$ -octylsebacic acid (V). Under more vigorous conditions 9-oxoheptadecanoic acid (VI) was formed and hydrolyzed to octanoic (VII), nonanoic (VIII), and azelaic acids (IX) as main products. KMnO<sub>4</sub> oxidn. of oleic acid gave II and HCO<sub>3</sub>H. Hydroxylation of oleic and 10-undecenoic acid gave I and 10,11-dihydroxyundecanoic acid (X), resp. AcO<sub>2</sub>H hydroxylation of Me ricinoleate and subsequent hydrolysis yielded 9,10,12-trihydroxyoctadecanoic acid (XI). Oxidn. of the corresponding dihydroxyacid with N-bromosuccinimide gave 9,10-dioxooctadecenoic acid (XII), reduced by Zn and AcOH to a mixt. (XIII) of 9-hydroxy-10-oxo- and 10-hydroxy-9-oxooctadecanoic acids; Me ester, v 3470, 1735, 1715 cm.<sup>-1</sup> Crystn. of natural material from dil. MeOH yielded  $\beta$ - **aleuritic acid** (XIV), m. 100-1°. I (3.5 g.) and 10 g. 1:1 finely powd. KOH-NaOH heated 1 hr. at 230-40° and the cooled mass taken up in H<sub>2</sub>O, acidified, and the product isolated with Et<sub>2</sub>O gave 3.3 g. V, m. 110-11°, oxidized with KMnO<sub>4</sub> to VI, m. 79.5-80.5°; Me ester m. 43-4°, v 1715, 1735 cm.<sup>-1</sup> With temps. of 200-60°, the yield of V varied from 40 to 80%. I (4.6 g.) autoclaved in stainless steel (N atm.) 2 hrs. at 300° with 12 g. KOH in 2 ml. H<sub>2</sub>O with evolution of H and formation of 4.5 g. acidic product and the acid fractionally crystd. from dil. MeOH and CHCl<sub>3</sub>-petr. ether yielded 40% V. XIII (1.03 g.) and 5 g. 1:1

KOH-NaOH heated 30 min. at 230° and the product (1.04 g., contg. 1, 5, and 7% VII, VIII and IX by gas liquid chromatography) recrystd. from CHCl<sub>3</sub>-petr. ether yielded 52% V. XIII (0.76 g.) in 50 ml. 50% alc. KOH refluxed 10 hrs. and concd. to 20 ml., dild. with 50 ml. H<sub>2</sub>O and acidified with 2N H<sub>2</sub>SO<sub>4</sub>, steam-distd. to give 48 mg. acidic fraction contg. 9:91 VII-VIII, and the washed (hot H<sub>2</sub>O) and dried (Et<sub>2</sub>O) residual oil crystd. gave 0.16 g. V. The aq. mother liquors contained 60 mg. IX. XIII (1.7 g.) in 100 ml. 10% aq. KOH and then 20 ml. H<sub>2</sub>O added successively in 1.5 hrs. with stirring to 5 g. KOH and then 20 ml. H<sub>2</sub>O added successively in 1.5 hrs. with stirring to 5 g. KOH and 5 ml. H<sub>2</sub>O in a Cu vessel at 250°, the distillate extd. with Et<sub>2</sub>O, and the ext. evapd. gave 50 mg. 3:2 nonanol-nonanal. The distn. residue worked up yielded 0.5 g. V. XII (1.02 g.) and 4 g. 1:1 KOH-NaOH heated 15 min. with a few drops of H<sub>2</sub>O at 160° and the cooled melt taken up in H<sub>2</sub>O, acidified and the acid soln. steam-distd. to give 4% VIII, the residual oil washed in hot H<sub>2</sub>O, and dried in Et<sub>2</sub>O yielded 0.75 g. V. The aq. mother liquors contained 4% IX. II (2.3 g.) and 7 g. KOH heated 1 hr. at 260-70° and the cooled mass taken up in H<sub>2</sub>O, the acidified soln. extd. with petr. ether and Et<sub>2</sub>O, and the product crystd. (petr. ether or dil. MeOH) gave 0.57 g. VI. I (1.2 g.) and 6 g. KOH in 10 ml. H<sub>2</sub>O heated 2 hrs. in a stainless steel autoclave (N atm.) at 340° with evolution of H and the cooled mixt. worked up gave 1.05 g. acidic product, crystd. (dil. MeOH) to give 0.14 g. VI. Considered in conjunction with the previous results of Le Sueur and Withers (CA 9, 603), the above transformations and the close similarity between the final products from VI and those from I and II clearly indicated that fission of I and II proceeded by the successive formation of V and VI by a benzilic acid type of rearrangement. X (3.3 g.) and 9 g. KOH heated 1 hr. at 300° and the rapidly cooled mixt. taken up in 300 ml. H<sub>2</sub>O, the soln. acidified with evolution of CO<sub>2</sub>, and extd. with Et<sub>2</sub>O gave 3.1 g. acidic product, m. 125-7°, analyzed by gas liquid chromatography of the Me esters to show the presence of 95% sebacic acid, 5% VIII, and a trace of suberic acid. XI (1.28 g.) and 5.2 g. KOH heated 1 hr. at 300° (N atm.) and the neutral product carried over by the gas stream condensed at 0°, taken up in Et<sub>2</sub>O, and the oily product (65 mg.) analyzed by gas-liquid chromatography on **Polyethylene** adipate at 130° showed the presence of 94:6 2-octanol-2-octanone. Isolation of the acidic products and fractional crystn. from H<sub>2</sub>O gave IX. XI (6.4 g.) in 50 ml. 30% KOH added with stirring in 90 min. to 10 g. KOH at 300° in a Cu vessel and the distillate condensed to yield 0.8 g. mixt. of 79:21 2-octanol-2-octanone, [α]D<sub>24</sub> 0.13° (alc.), the acidic products isolated, and the dicarboxylic acids fractionally sep'd. by crystn. from H<sub>2</sub>O gave mixts. similar to those of 1 hr. alk. fusion at 300° (acidic products and yield in moles given): monocarboxylic acids, C<sub>7</sub> 0.25

(0.32), C8 0.08 (0.12), C9 0.04 (0.04); dicarboxylic acids, C8 0.13 (0.11), C9 0.47 (0.46). In view of the O function at C-12, the fission of XI probably involved  $\beta$ -hydroxyketone or  $\beta$ -diketone intermediates with fission at the 10,11- and 11,12-bonds predominating. Initial dehydrogenation of the C-12 OH group and fission to give HO<sub>2</sub>C(CH<sub>2</sub>)<sub>7</sub>CH(OH)CHO and 2-octanone would also favor the formation of IX. XIV fused 1 hr. with KOH at 250° and the acid product triturated with Et<sub>2</sub>O gave 7-pentadecenone-1,15-dioic acid, m. 103-4°; Me ester, v 1715, 1735 cm.<sup>-1</sup>. Fractional pptn. of the acidic product from another expt. with petr. ether and crystn. of the solid product from CHCl<sub>3</sub>-MeOH and from H<sub>2</sub>O gave HOCH<sub>2</sub>(CH<sub>2</sub>)<sub>5</sub>C(OH)(CO<sub>2</sub>H)(CH<sub>2</sub>)<sub>7</sub>CO<sub>2</sub>H, m. 143-4°. XIV, HOCH<sub>2</sub>(CH<sub>2</sub>)<sub>5</sub>CH(OH)CH(OH)(CH<sub>2</sub>)<sub>7</sub>CO<sub>2</sub>H, was dehydrogenated in 1 hr. at 300° by alk. fusion to give approx. equimolar amts. of hexanoic, octanoic, pimelic, and azelaic acids (acids and yields in moles given): hexanoic, 0.16, 0.23, 0.14, 0.19, 0.22 (2.5 hrs. reaction time); octanoic, 0.16, 0.23, 0.13, 0.19, 0.20; pimelic, 0.17, 0.22, 0.15, 0.16, 0.22; IX, 0.15, 0.24, 0.14, 0.17, 0.23. A branched chain or cyclic dicarboxylic acid of higher mol. wt. was also formed simultaneously in yields up to 40%.

CC 10B (Organic Chemistry: Aliphatic Compounds)

L36 ANSWER 21 OF 21 HCA COPYRIGHT 2006 ACS on STN

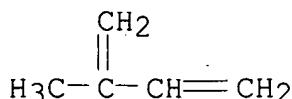
34:15282 Original Reference No. 34:2329a-c Long-chain acids. I. Extension of the isoprene rule. Mitter, P. C.; Bagchi, Phanindra Nath J. Indian Chem. Soc., 16, 402-4 (Unavailable) 1939.

AB By assuming that larger mols. can be formed from isoprene by head-to-tail union followed by addn. of H<sub>2</sub>O at a conjugated double bond at 1 end of a chain, partial or complete hydrogenation and removal of side-chain Me groups by oxidn., and partial or complete oxidn. of the terminal groups, the formation of a large no. of long-chain aliph. mono- and di-basic acids can be explained. The close connection of farnesol with sabininic acid suggests that juniperic acid and thapsic acid are similarly related to a diterpene, C<sub>20</sub>H<sub>32</sub>. Incomplete hydrogenation of the unsatd. system of the intermediate alc. and suitable oxidn. would lead to ambrettolic acid and epiambrettolic acid (closely related to aleuritic acid, present in shellac resin).

IT 78-79-5, Isoprene  
(formation of larger mols. from)

RN 78-79-5 HCA

CN 1,3-Butadiene, 2-methyl- (9CI) (CA INDEX NAME)

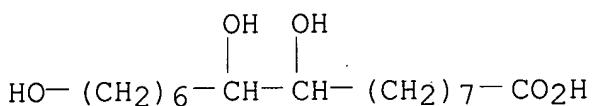


IT **6949-98-0, Aleuritic acid**

(prepn. of)

RN 6949-98-0 HCA

CN Hexadecanoic acid, 9,10,16-trihydroxy- (7CI, 8CI, 9CI) (CA INDEX NAME)



CC 10 (Organic Chemistry)

IT **78-79-5, Isoprene**

(formation of larger mols. from)

IT 505-54-4, Thapsic acid 506-13-8, Juniperic acid 506-14-9,  
Ambrettolic acid **6949-98-0, Aleuritic acid**

(prepn. of)

=&gt; D HIS L38-

FILE 'HCA' ENTERED AT 14:03:38 ON 08 NOV 2006

L38 34 S ALEURITATE#

L39 3 S L38 AND L23

L40 3 S L38 AND L24

L41 2 S (L39 OR L40) NOT L35

L42 2 S L41 AND 1840-2004/PY,PRY

=&gt; D L42 1-2 CBIB ABS HITSTR HITIND

L42 ANSWER 1 OF 2 HCA COPYRIGHT 2006 ACS on STN

127:92398 Manufacture of aleuritic acid from **seed** lac: some practical considerations. Rao, L. Jagan Mohan; Srinivas, P.; Gurudutt, K. N. (Central Food Technological Research Institute, Mysore, 570 013, India). Journal of Scientific & Industrial Research, 56(3), 164-167 (English) **1997**. CODEN: JSIRAC. ISSN: 0022-4456. Publisher: National Institute of Science Communication.AB The industrial process for manufg. aleuritic acid from **seed** lac poses certain problems like the long sapon. period, need for reprocessing the crude product and the inevitable loss during this step. Some improvements are suggested to overcome these problems and get threo-aleuritic acid of 92% purity in an optimized yield of 23%. A simple step of crystn. of the crude Na **aleuritate**

from water was introduced which effectively removes gummy pigments and other nonvolatiles. A gas chromatog. assay procedure for detg. its purity is developed.

CC 9-16 (Biochemical Methods)  
 ST aleuritic acid isolation **seed lac**  
 IT Shellac  
     (aleuritic acid isolation from **seed lac**)  
 IT 17941-34-3P, threo-Aleuritic acid  
     (isolation of aleuritic acid from **seed lac**)

L42 ANSWER 2 OF 2 HCA COPYRIGHT 2006 ACS on STN  
 75:153036 Coating and printing compositions for **polypropylene** molded products. Mihara, Kazuyuki (Mitsubishi Petrochemical Co., Ltd.). Jpn. Tokkyo Koho JP 45041513 B4 **19701226** Showa, 3 pp. (Japanese). CODEN: JAXXAD. APPLICATION: JP 19650220.  
 AB A coating compn. contg. linoleic acid-modified aleuritic acid pentaerythritol ester showed good adhesion on **polypropylene** moldings. For example, a white enamel was prep'd. from TiO<sub>2</sub>, the ester, Al rosin salt, and a chlorinated rubber.  
 IT **9003-07-0**, uses and miscellaneous  
     (coatings on molded products of, of aleuritic acid esters-chlorinated rubber, for improved adhesion)  
 RN 9003-07-0 HCA  
 CN 1-Propene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 115-07-1  
 CMF C3 H6



IC C09D; C09F; B29C  
 CC 42 (Coatings, Inks, and Related Products)  
 ST **aleuritate** coating **polypropylene**  
 IT Rubber, chlorinated  
     (coatings, contg. linoleic acid-modified aleuritic acid pentaerythritol ester, on **propylene polymer** molded products)  
 IT Coating materials  
     (linoleic acid-modified aleuritic acid pentaerythritol ester, contg. chlorinated rubber, on **propylene polymer** molded products)  
 IT Hexadecanoic acid, 9,10,16-trihydroxy-, pentaerythritol ester  
     (coatings, contg. chlorinated rubber, on **propylene polymer** molded products)  
 IT **9003-07-0**, uses and miscellaneous

(coatings on molded products of, of aleuritic acid  
esters-chlorinated rubber, for improved adhesion)